

**The Poultry Watering Specialists**



# **Installation Manual: Watering System Floor Application Featuring Nuvo™ Product Line**

**Issued: August 2023**

**Superior performance, exceptional durability and easy management.**



**ZIGGITY SYSTEMS, INC.**  
**STANDARD LIMITED WARRANTY**

Ziggity Systems, Inc. ("Ziggity") warrants to the original retail purchaser ("Purchaser") of any Ziggity product ("Product"), sold by an authorized Ziggity distributor, that for one (1) year from the date of original retail purchase, the Product will be free from defects in materials and workmanship that are material in nature. The sole remedy available to Purchaser in the event of such a defect will be the repair or replacement (at Ziggity's sole option) of the materially defective Product, excluding labor. Purchaser will be responsible for the expense of shipping the defective Product to Ziggity and, upon Ziggity's approval of the warranty claim, Ziggity will be responsible for the expense of shipping the repaired or replaced Product to Purchaser. Any Product or Product replacement parts provided by Ziggity under this warranty are only warranted for the remainder of the warranty period for the original Product. Any Product or Product replacement part replaced by Ziggity under this warranty becomes the property of Ziggity. For warranty service, please contact an authorized Ziggity distributor. Alternatively, warranty requests may be sent directly to Ziggity at 101 Industrial Parkway East, Middlebury IN, 46540, USA.

**This limited warranty excludes liability for defects in or damage to the Product (both internal and external) caused, directly or indirectly, by misuse, neglect, negligence, alteration, accident, excessive mineral or chemical contact, corrosive chemical use, minerals or sediment in the water, poor quality water, acts of nature or failure to: (A) follow Ziggity's guidelines and recommendations for the Product, (B) follow installation and operating instructions for the Product, (C) use potable and filtered water in and with the Product, or (D) properly maintain the Product. It also excludes used Products or Products acquired from sellers who are not authorized Ziggity distributors. Furthermore, this warranty does not extend to any item that is manufactured by others, including without limitation, items such as: galvanized support pipe, water filters, water meters, sight gauges and proportioners. These items are warranted separately by the original manufacturer, if at all.**

**Ziggity makes no other representations or warranties of any kind except as expressly stated in this warranty. Implied warranties, if any, arising by state law, including any implied warranties of merchantability or of fitness for a particular purpose, are limited in duration and scope to the terms of this limited warranty. Ziggity disclaims any and all implied warranties, including the warranty of merchantability and the warranty of fitness for a particular purpose, on components and items not covered by this limited warranty. To the fullest extent permitted by applicable law, Ziggity shall not be liable to Purchaser for any consequential, incidental, exemplary, punitive, special, or indirect damages, and Ziggity shall not be liable for any damages that are based on negligence, breach of warranty, or strict liability. Ziggity's liability under this warranty shall in no event exceed the purchase price paid by Purchaser for the defective Product. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above exclusions and limitations may not apply fully to you.**

Ziggity may from time to time, through its issuance of formal Information Update documents, provide for supplemental warranty coverage in addition to this standard limited warranty for certain products, or may provide for deviations or exclusions from this standard warranty for certain products. If any such supplemental, deviation, or exclusion Information Updates apply to your Product, you will be provided with a copy of such Information Updates at the time of your original retail purchase and the standard limited warranty provided for above will be deemed modified accordingly.

**No person, including any dealer, distributor, agent, or other representative of Ziggity, is authorized to make any representation or warranty concerning the Product other than as specifically contained in this standard limited warranty and any Information Update from Ziggity providing for any supplemental warranty coverage or deviation or exclusion from warranty coverage. Ziggity reserves the right to change Product models, make changes to the Product and Product specifications, at any time and without notice or obligation to Purchaser.**

**[CONTINUES ON NEXT PAGE]**

**ZIGGITY SYSTEMS, INC.**  
**EXTENDED DRINKER WARRANTY**

In addition to its standard limited warranty, Ziggity provides an extended warranty for certain Drinkers manufactured by Ziggity. All other provisions of the standard limited warranty apply to the Extended Drinker Warranty. If any covered Drinker is determined by Ziggity to be defective in materials or workmanship after the expiration of the one (1) year standard warranty period and prior to ten (10) years after the date of the original retail purchase, Ziggity will provide a replacement Drinker or Drinker components, as applicable, to the original retail purchaser at the following discount off of published list/brutto prices:

<b>End User Purchase Date</b>	<b>End User Discount</b>
0 - 36 months	100% (No charge)
37 - 60 months	65%
61 - 120 months	40%

**WARNING – AVOID USE WITH OR EXPOSURE TO CORROSIVE PRODUCTS**

Do not allow Ziggity products to come into contact with petroleum, phenol or aldehyde based products or any other corrosive product in general. Contact with such corrosive products is likely to result in damage to or failure of the Ziggity product. Additionally, aggressive chlorination and/or acidification programs (greater than 1 ppm and/or pH less than 6) will shorten the life of Ziggity products. Failure to follow this warning will void any otherwise applicable warranty coverage for the Ziggity product when the product is chemically damaged.

**WARNING – GALVANIZED SUPPORT PIPE SPECIFICATIONS**

Please note that using a support pipe that does not conform to the specifications noted in Ziggity's official written publications, including but not limited to, Information Update 2065 and our Installation Manuals, will compromise system performance and make null and void Ziggity's warranty provisions.

**PLEASE NOTE**

Extended Drinker Warranty does not apply to Ziggity drinkers with the following metering pin colors:  
Blue, Gray, Gold, Red, and Black.

Extended Drinker Warranty does not apply to T-Max Drinkers.

## SPECIFICATIONS / INSTALLATION INSTRUCTIONS / NOTES / WARNINGS ETC.

### **GALVANIZED SUPPORT PIPE SPECIFICATIONS:**

- Outside Diameter (O.D.): 1.050 in ( $\pm 0.005$  in) or 26.90 mm ( $\pm 0.30$ mm)
- Wall Thickness: 19 Gauge or 1.00 mm (minimum acceptable wall: 0.037 in or 0.94 mm)
- ASTM - A513 or equivalent standard
- Swage element coaxial or concentric to the remainder of the pipe
- Bow tolerance: 0.031 in or 0.80 mm per 3 feet or 1 meter section
- G60 Coating or better
- Ends deburred and painted with a polyester-based polymer containing zinc oxide

**SLOPE FLOOR APPLICATIONS:** There are two resources available for proper set-up and installation of slope neutralizers in slope poultry houses. "Installation Manual: Slope Neutralizer Floor Applications" and a video entitled "How to install Ziggity Slope Neutralizer". Both can be found under the Support tab (Installation Manuals and Installation Videos) on the Ziggity.com website.

**SELF-TAPPING SCREWS:** For ease of installation, use an 18V or stronger impact driver

### **WARNINGS:**

- All Ziggity water bearing pipes must be installed in a manner to accommodate temperature induced pipe expansion and contraction. Failure to do so will cause pipes to snake, break, or gap resulting in water floods. These potential problems can be avoided by following the procedures as spelled out in Ziggity's Floor Installation Manuals.



## The Poultry Watering Specialists



## CONTENTS

### WATERING SYSTEM FLOOR APPLICATION INSTALLATION

Support Pipe .....	6
Nuvo™ Regulator and Riser Assembly .....	7
Clip-On Saddle Assembly - Applies to 1 in PVC Pipe Systems Only .....	9
Clip-On Bracket Orientation .....	10
Clip-On Bracket .....	10
Ace Clip-On Bracket .....	11
Aktive Bracket .....	11
Pipe Gapping with Ink Mark on End of Pipe .....	13
Pipe Gapping without Ink Mark on Pipe .....	14
Nuvo™ Flush End & Riser Assembly - Big Ace, Big Z, 1 IN PVC Systems .....	15
Nuvo™ Flush End & Riser Assembly - Ace Systems .....	16
Clip-On Bracket Screw Placement .....	16
Clip-On Bracket Screw .....	17
Twin Lock Drinker .....	17
Aktive Drinker .....	18
Big Z Drinker .....	18
Big Z Shielded Drinker (Clip-On Saddle) .....	19
Anti-Roost Cable .....	19
Drain Hose .....	20

### OPTIONAL EQUIPMENT

Inline Riser Assembly - Big Ace, Big Z, 1 IN PVC Systems .....	22
Inline Riser Assembly - Ace System .....	24
Shut Off Assembly + Inline Riser Assembly: Big Ace, Big Z, 1 IN PVC Systems .....	26
Shut Off Assembly + Inline Riser Assembly: Ace System .....	28
Control Clock/Controller/Solenoid Flush .....	30

### BEST PRACTICES

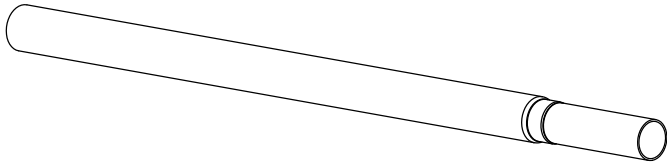
Disassembly: Aktive Drinkers .....	32
Assembly: Aktive Drinkers .....	32
Disassembly: MAX8 & MAX3 3600 Series Drinker .....	33
Assembly: MAX8 & MAX3 3600 Series Drinker .....	34
Disassembly: Big Z, TL, & All Non 3600 Series Drinkers .....	35
Assembly: Big Z, TL, & All Non 3600 Series Drinkers .....	36
Solenoid Valve Maintenance .....	37

### APPENDIX

Normal Operation Mode/Flush Mode .....	39
Nuvo™ Regulator Assembly .....	40
Nuvo™ Flush End Assembly .....	43
Nuvo™ Riser Assembly .....	45

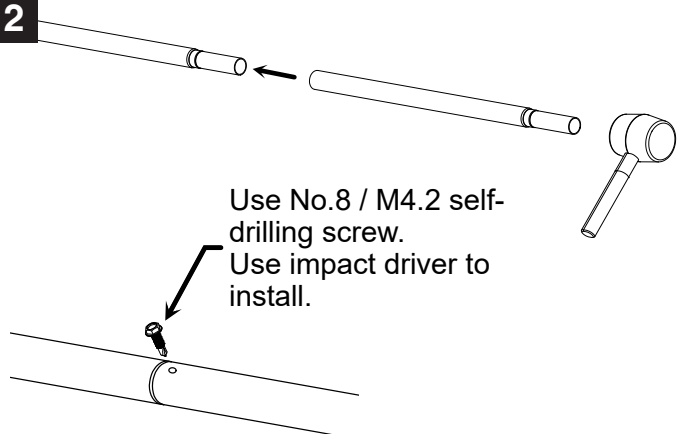
## SUPPORT PIPE

1

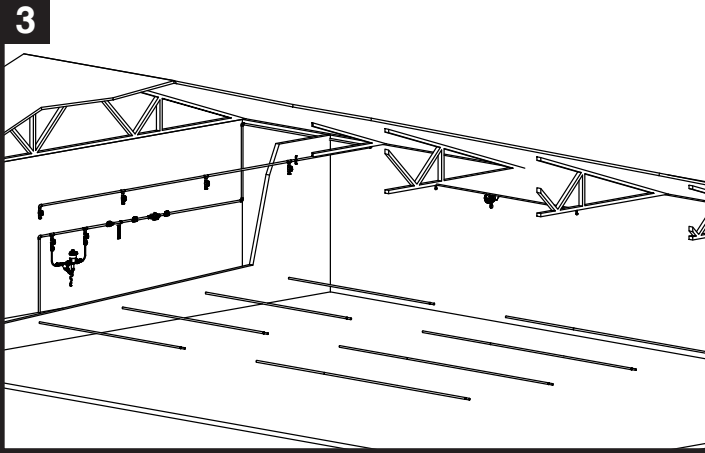


Outside Diameter (O.D.): 1.050 in ( $\pm 0.005$  in) or 26.90 mm ( $\pm 0.30$  mm)  
 Minimum Wall Thickness: 19 Gauge (0.037 in or 0.95 mm)  
**It can be thicker but not thinner!**  
 ASTM - A513 or equivalent  
 G60 Coating or better

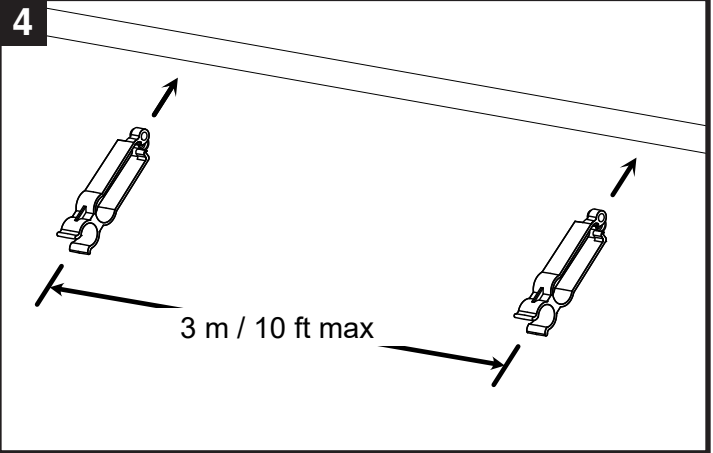
2



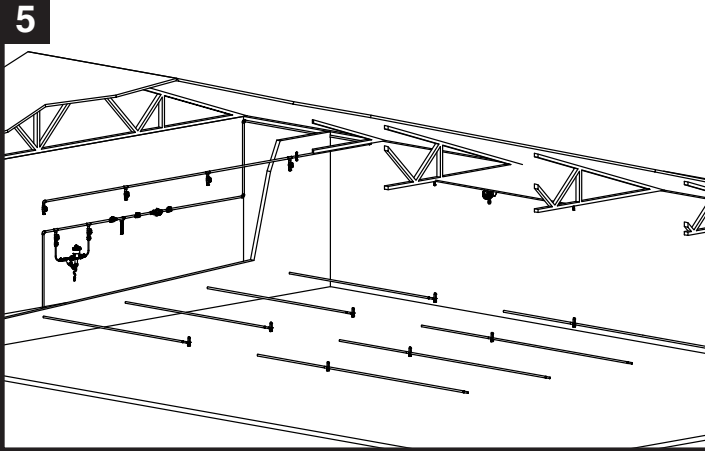
3



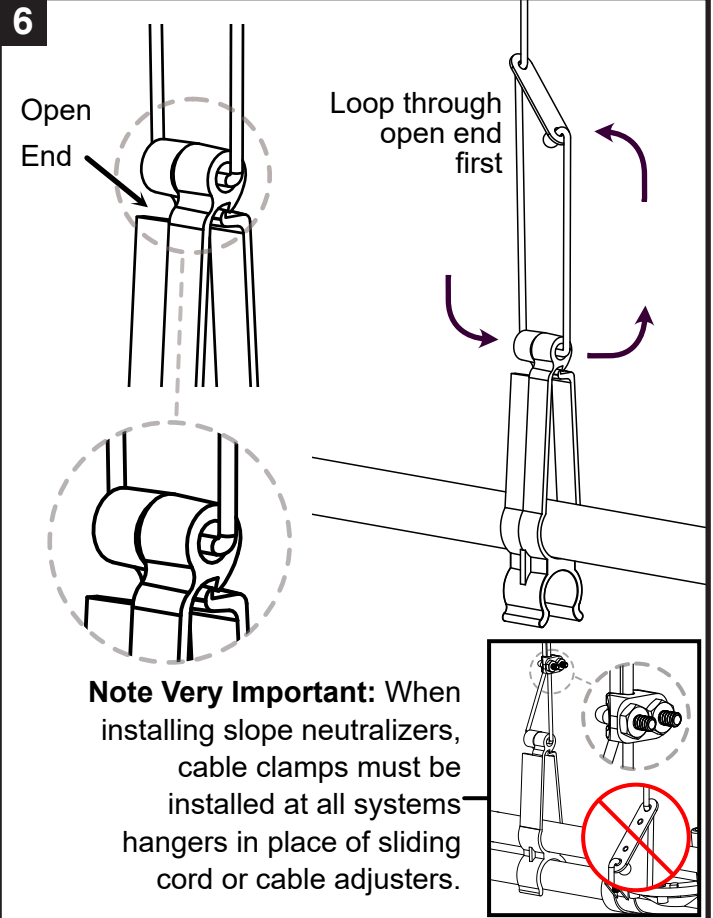
4



5

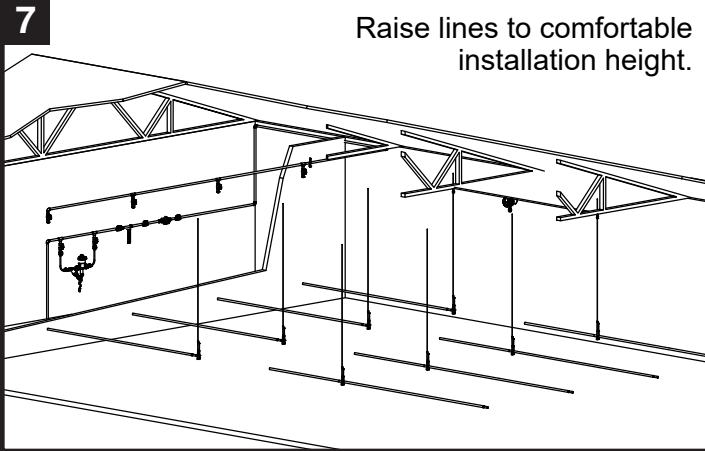


6



7

Raise lines to comfortable installation height.

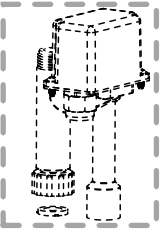


# NUVO™ REGULATOR AND RISER ASSEMBLY

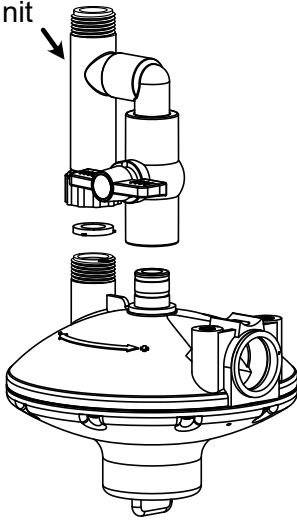
1

## REGULATOR ASSEMBLY

Auto Flush Unit

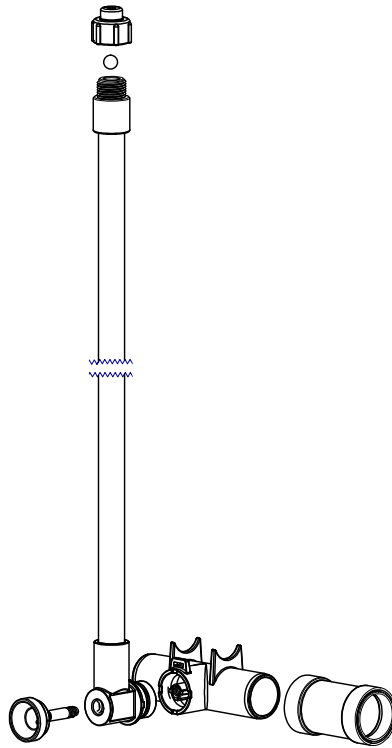


Flush Unit

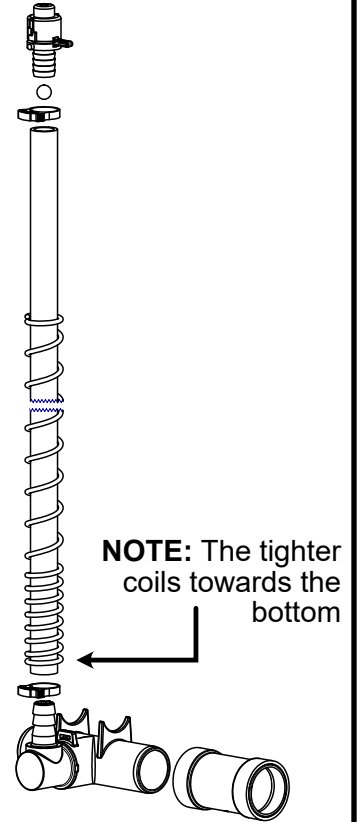


2

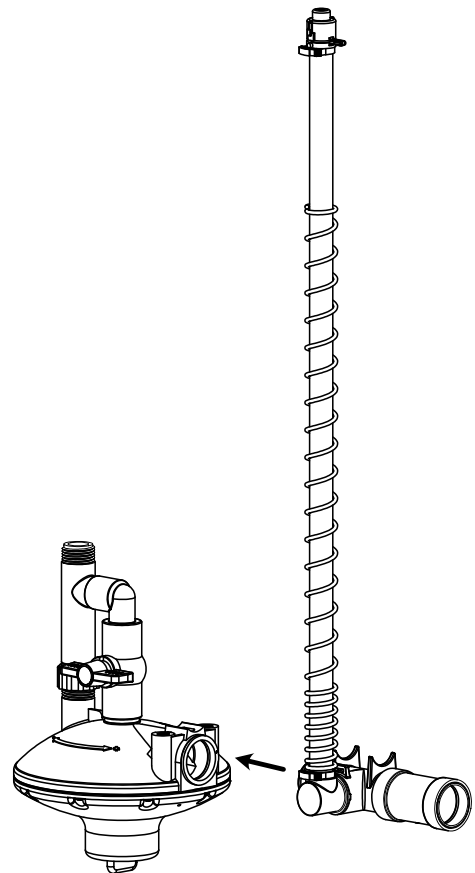
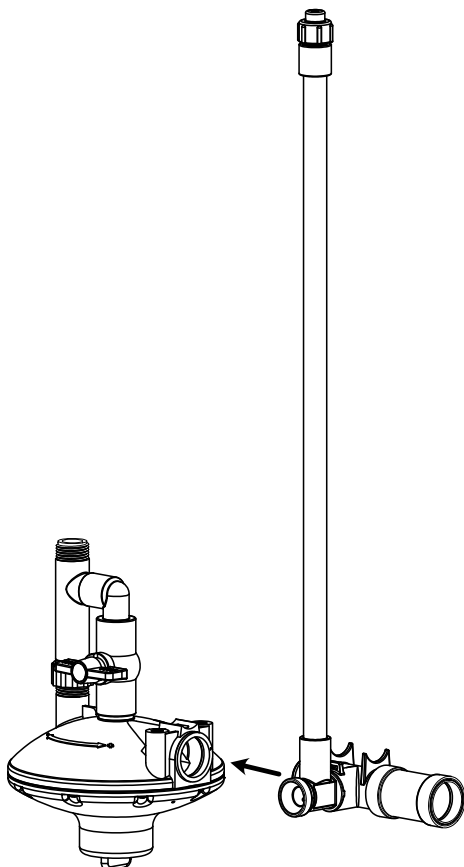
## ENDLINE RIGID RISER



## ENDLINE FLEX RISER

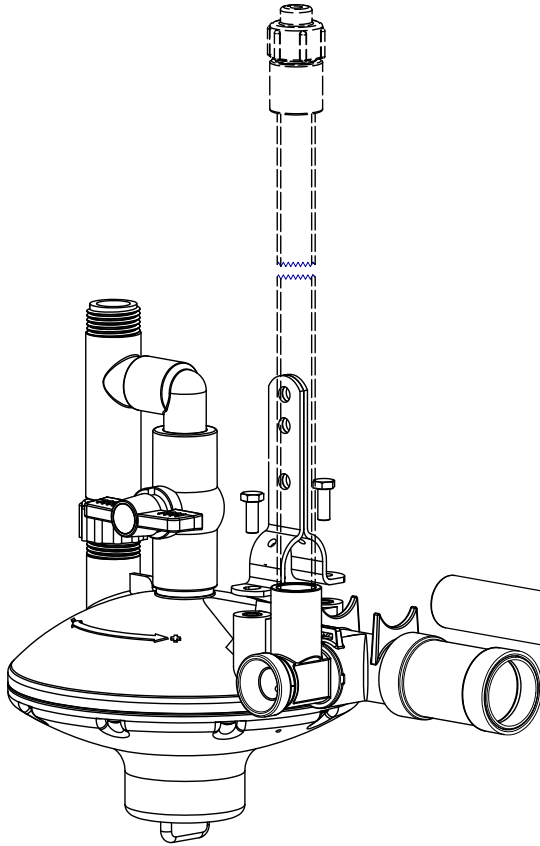


3

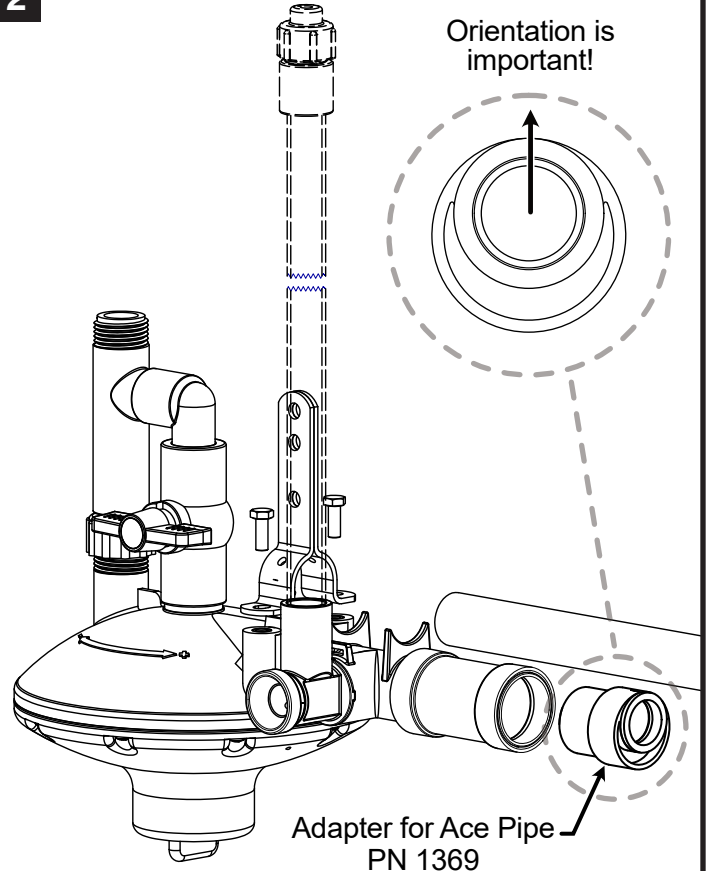


## MOUNTING SUPPORT PIPE INSTALLATION

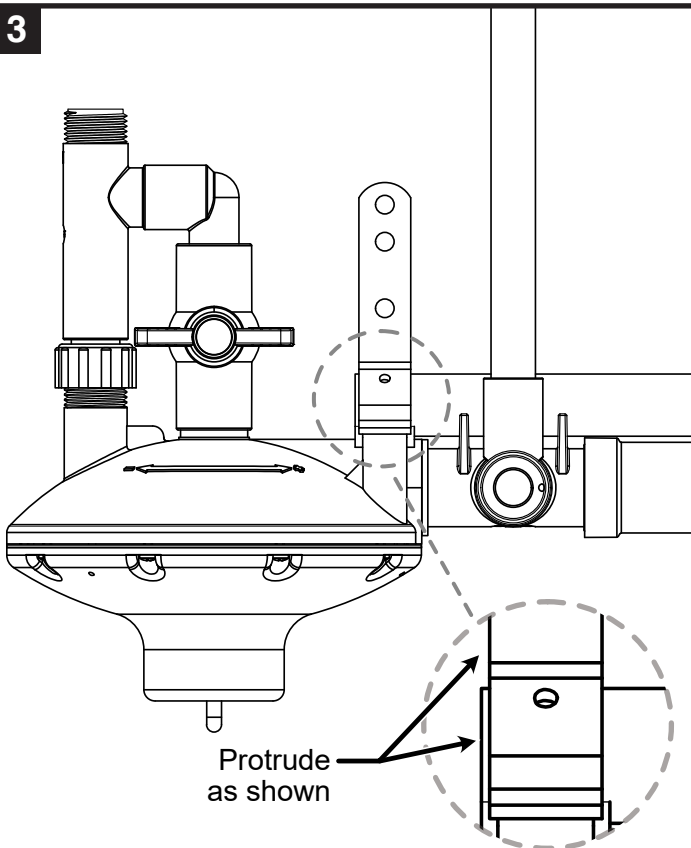
1



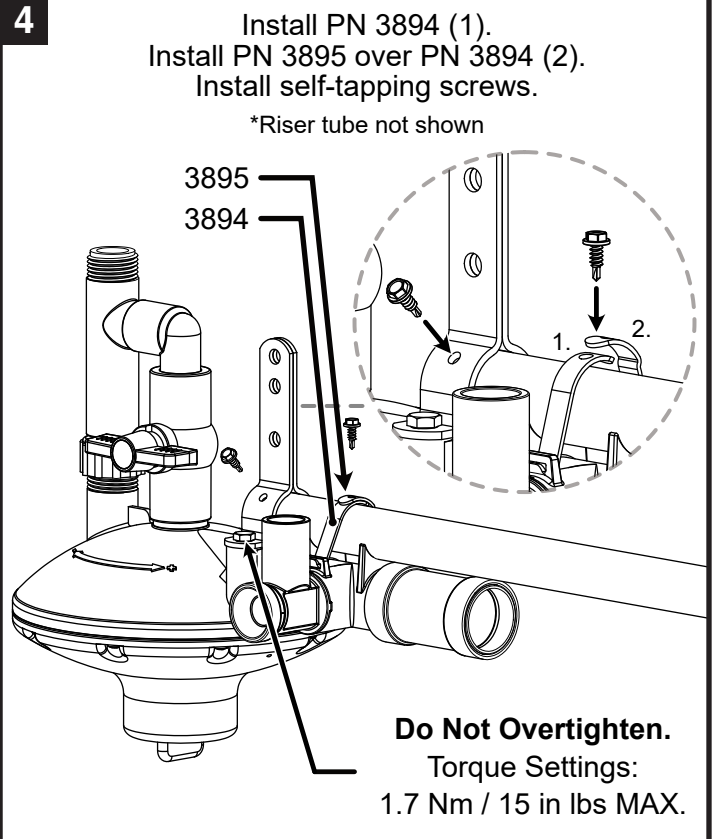
2



3



4

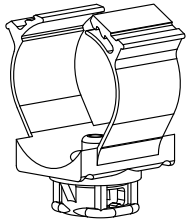


**Important:** PN 3895 must go on top PN 3894.

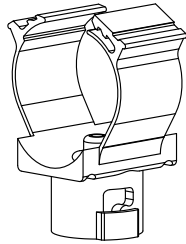
## CLIP-ON SADDLE ASSEMBLY - APPLIES TO 1 IN PVC PIPE SYSTEMS ONLY

1

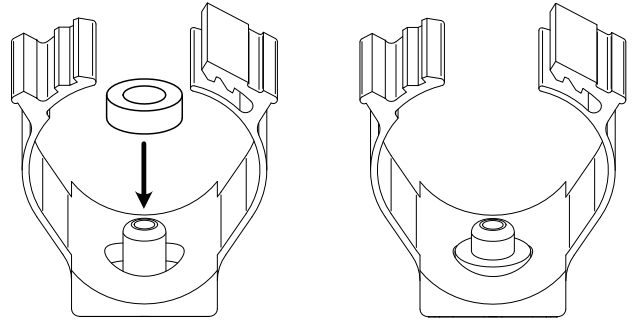
Saddle: Clip-On  
TL



Saddle: Clip-On  
Big Z



2

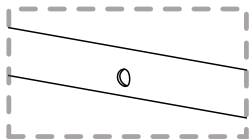


Install the grommet onto the saddle

3

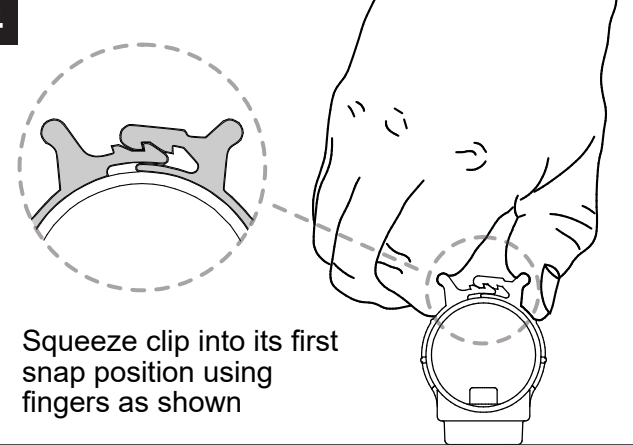
Clip-On  
Saddle

Water Pipe



Position clip-on saddle onto water pipe

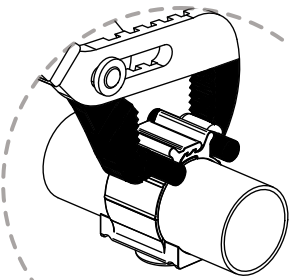
4



Squeeze clip into its first  
snap position using  
fingers as shown

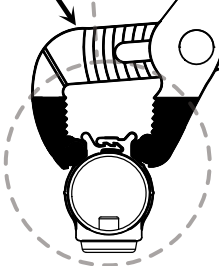
5

Use PN 3817 or PN 3832 to complete this step of the installation.

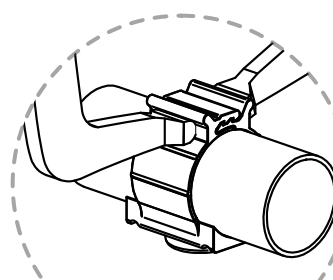


Center PN 3817 on the  
clip-on saddle as shown.

PN 3817

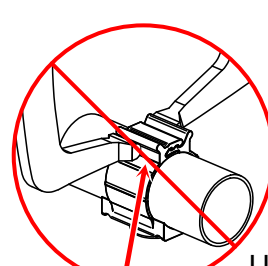


Use PN 3817 to squeeze the clip  
until the second snap is engaged.

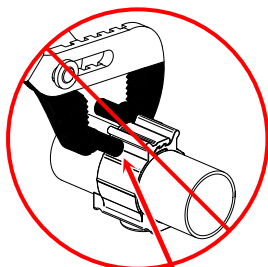


Center tool on the clip-on  
saddle as shown.

PN 3832

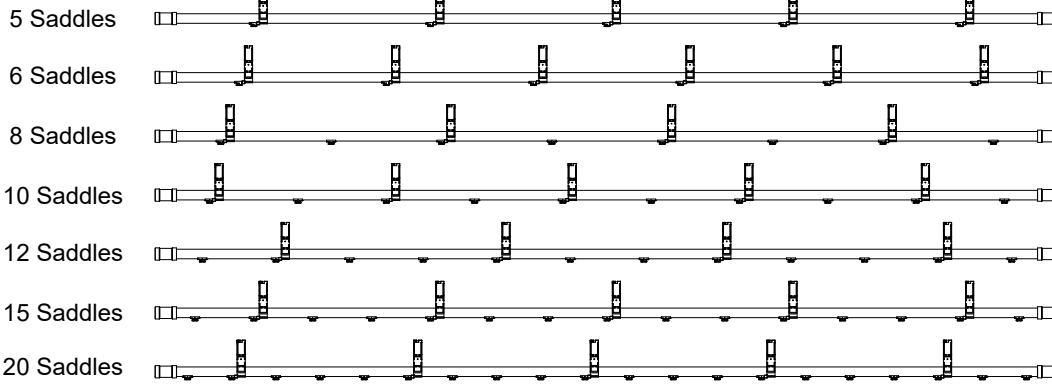


Use large vice-grip plier clamps  
(PN 3832 shown) to squeeze the  
clip until the second snap is  
engaged.

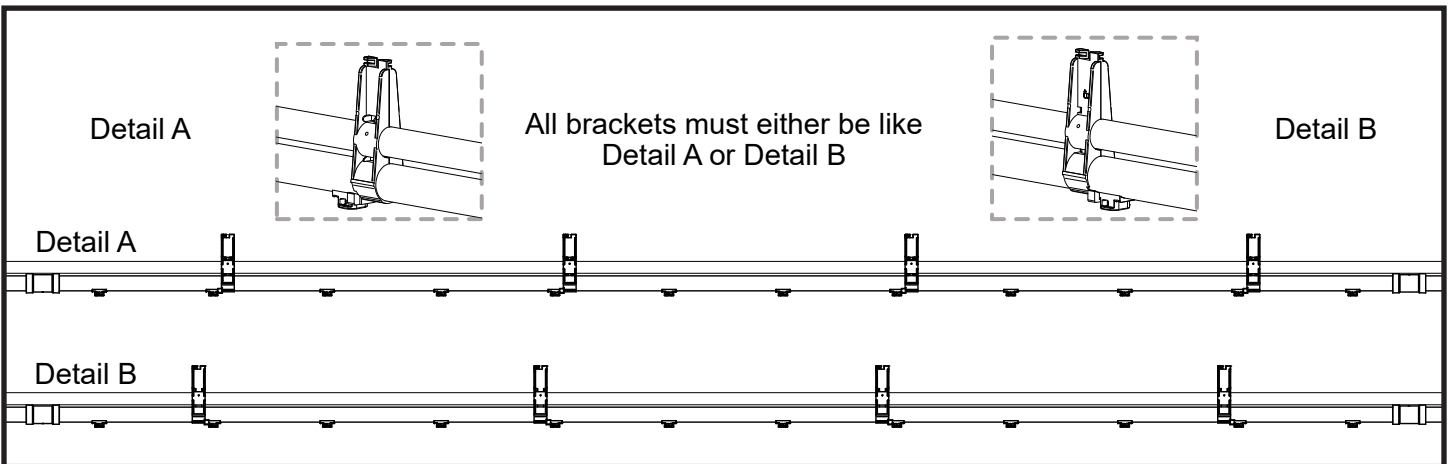
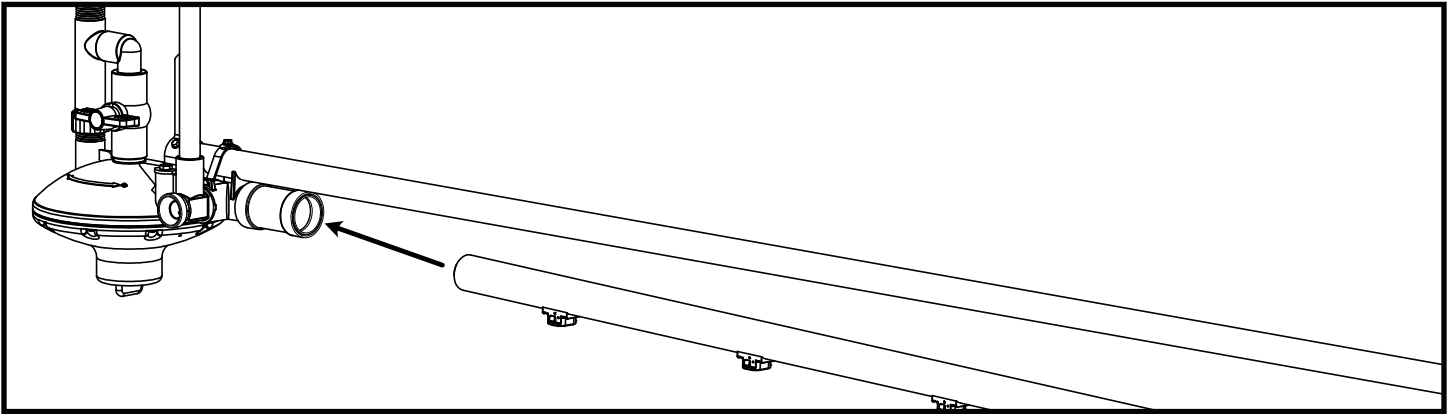


DO NOT offset the tool to  
one side. This will cause  
damage and product to fail.

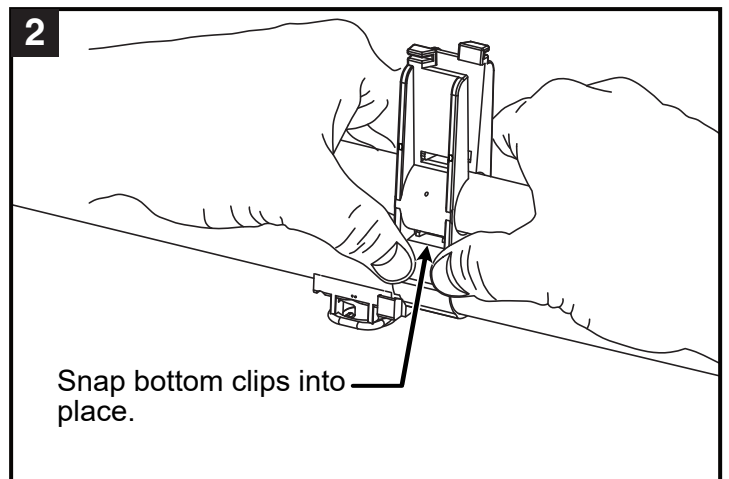
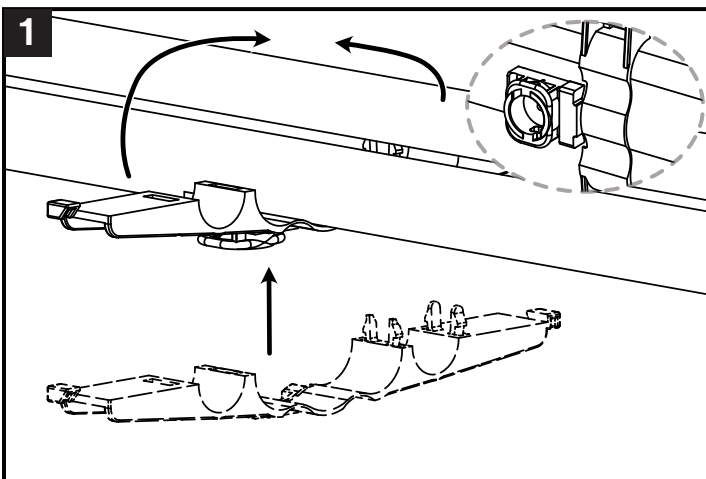
## CLIP-ON BRACKET ORIENTATION



**Important:** Install brackets as follows based on the number of saddles per pipe

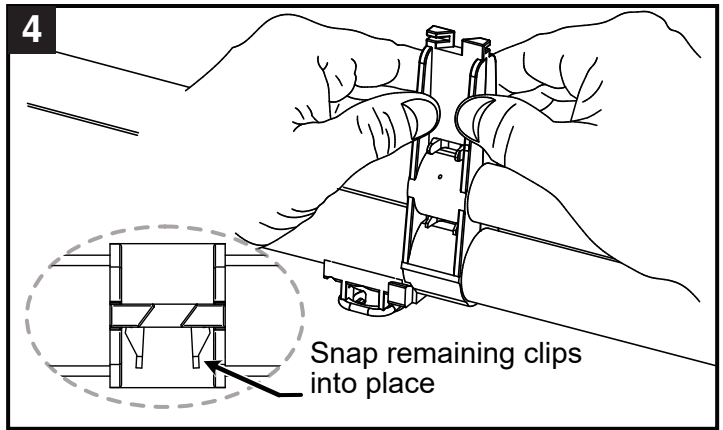
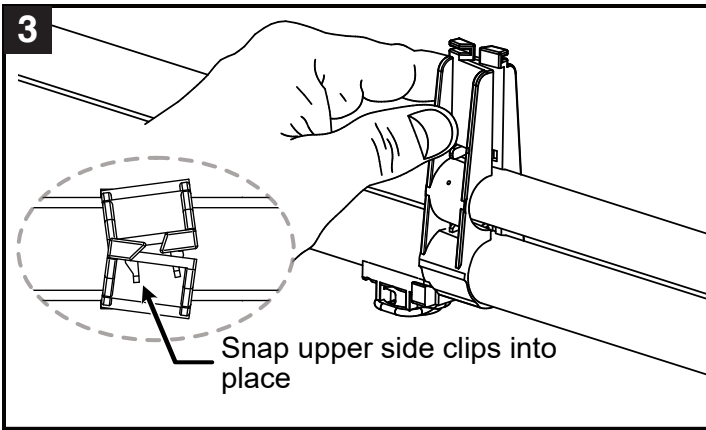


## CLIP-ON BRACKET

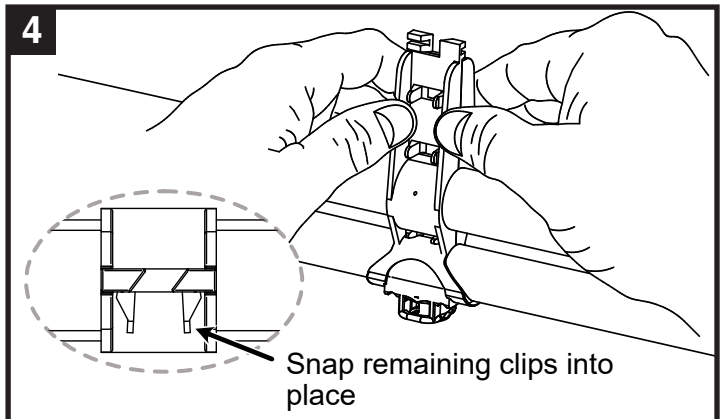
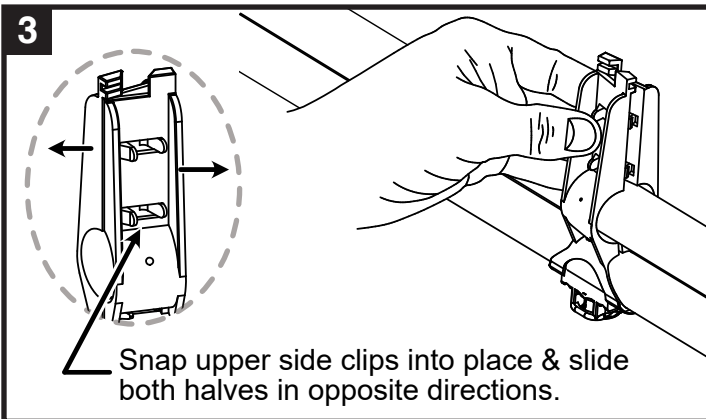
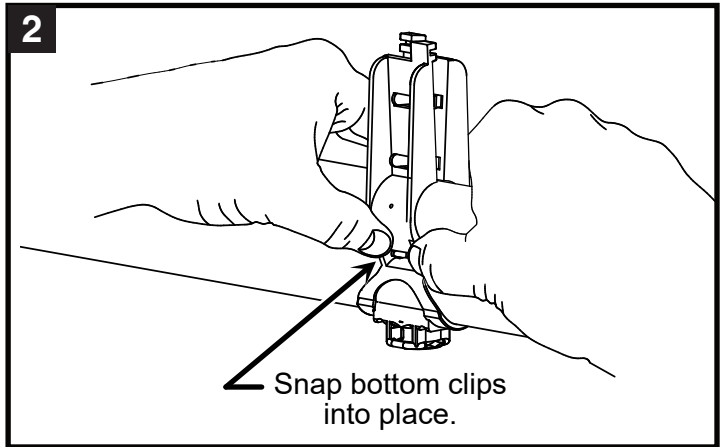
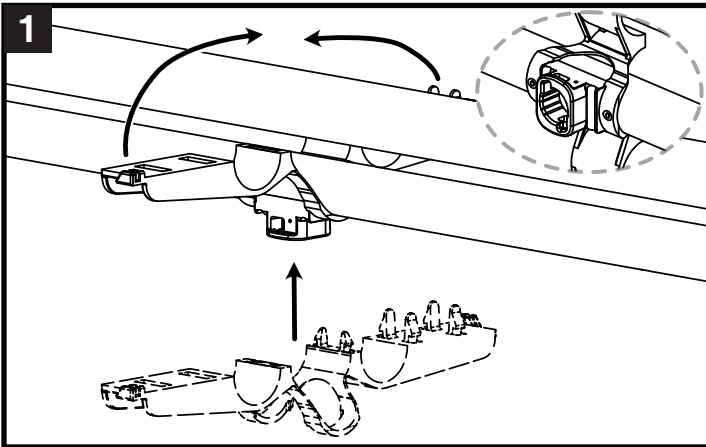




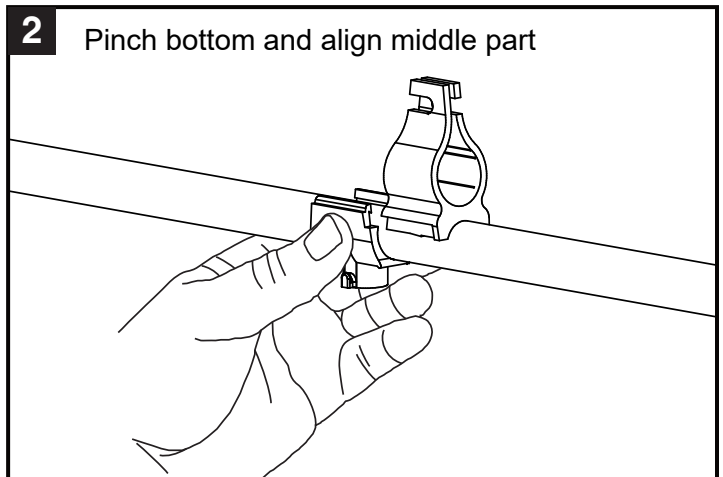
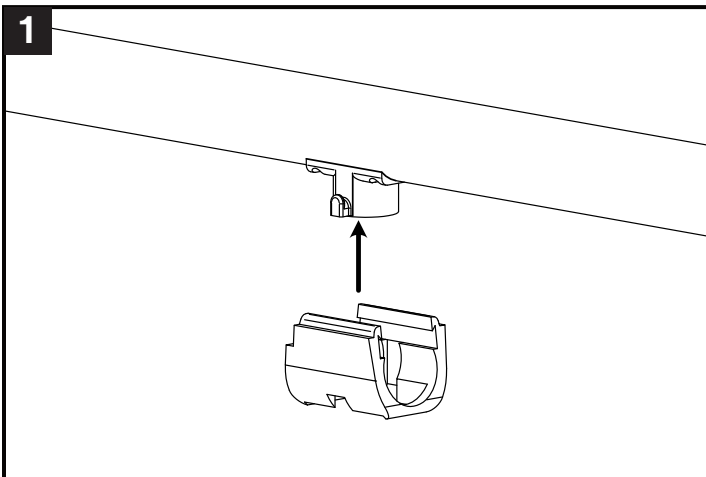
## CLIP-ON BRACKET



## ACE CLIP-ON BRACKET



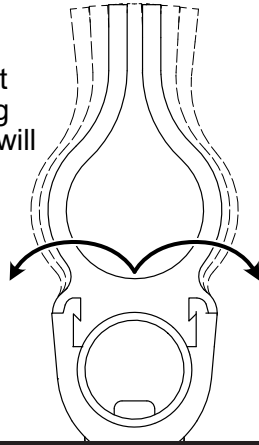
## AKTIVE BRACKET



## AKTIVE BRACKET

3

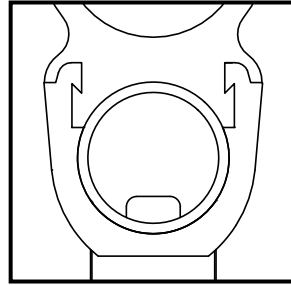
Rapidly pivot the middle part back and forth while pushing into the lower bracket. This will help with proper interface between the two parts.



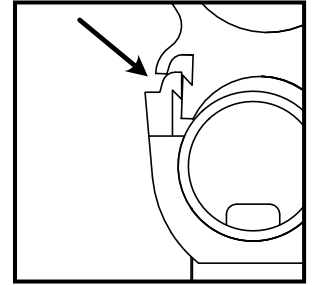
4

Make sure both sides of the bracket parts are aligned. If not aligned, remove middle part and repeat Steps 2 and 3.

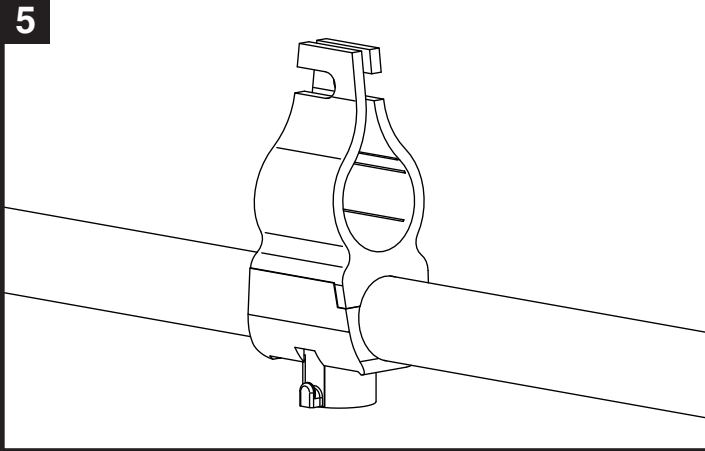
Good



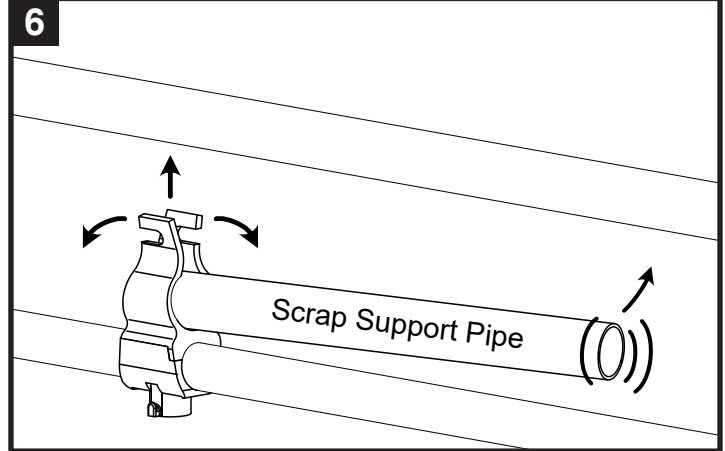
Bad



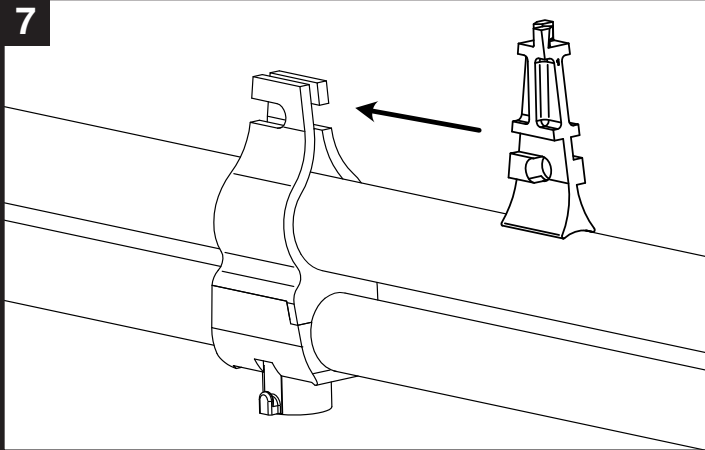
5



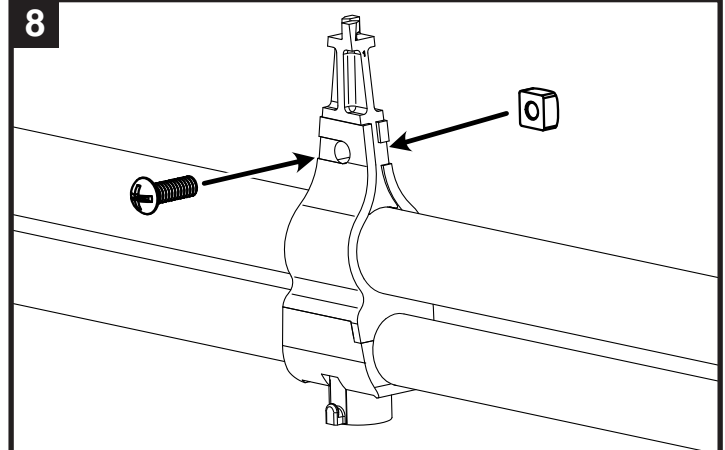
6



7

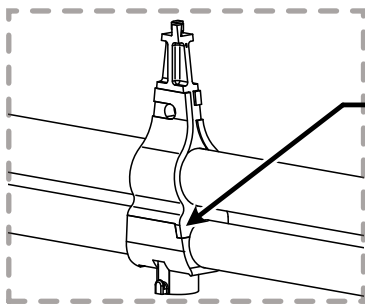


8



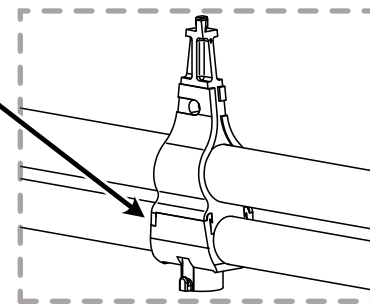
9

Detail A



**Important:** Note the side of the clip in regards to each detail.

Detail B



Detail A

Detail B

Detail A

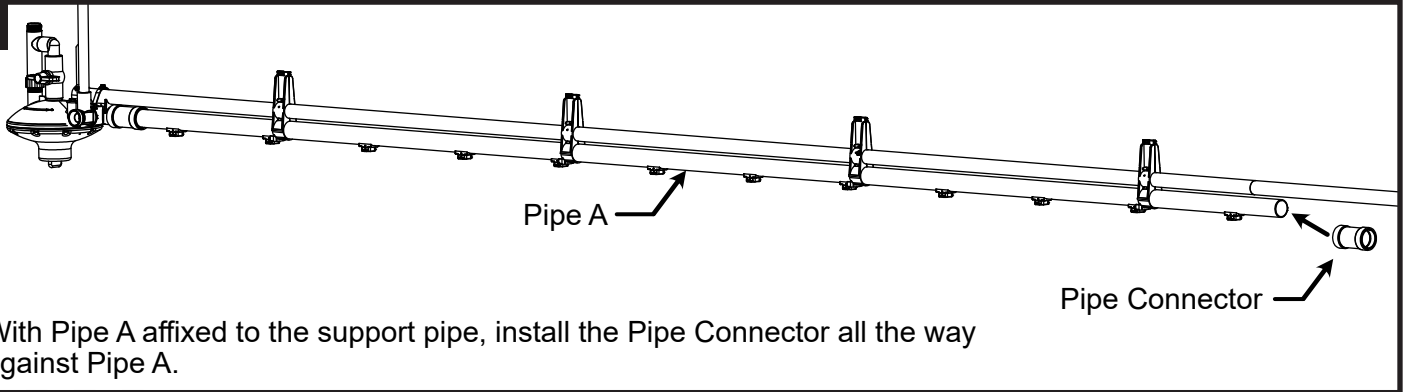
Detail B



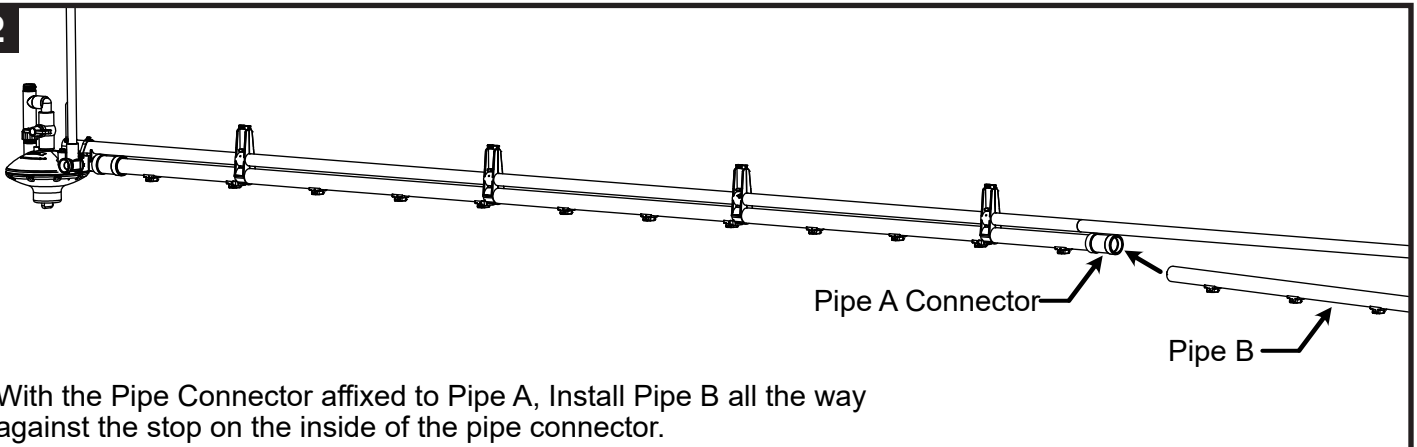
## PIPE GAPPING WITH INK MARK ON END OF PIPE

**WARNING:** All Ziggity pipes must be installed in the manner shown in order to accommodate pipe expansion and contractions as a result of temperature changes. Failure to do so will cause pipe snaking or separation.

1

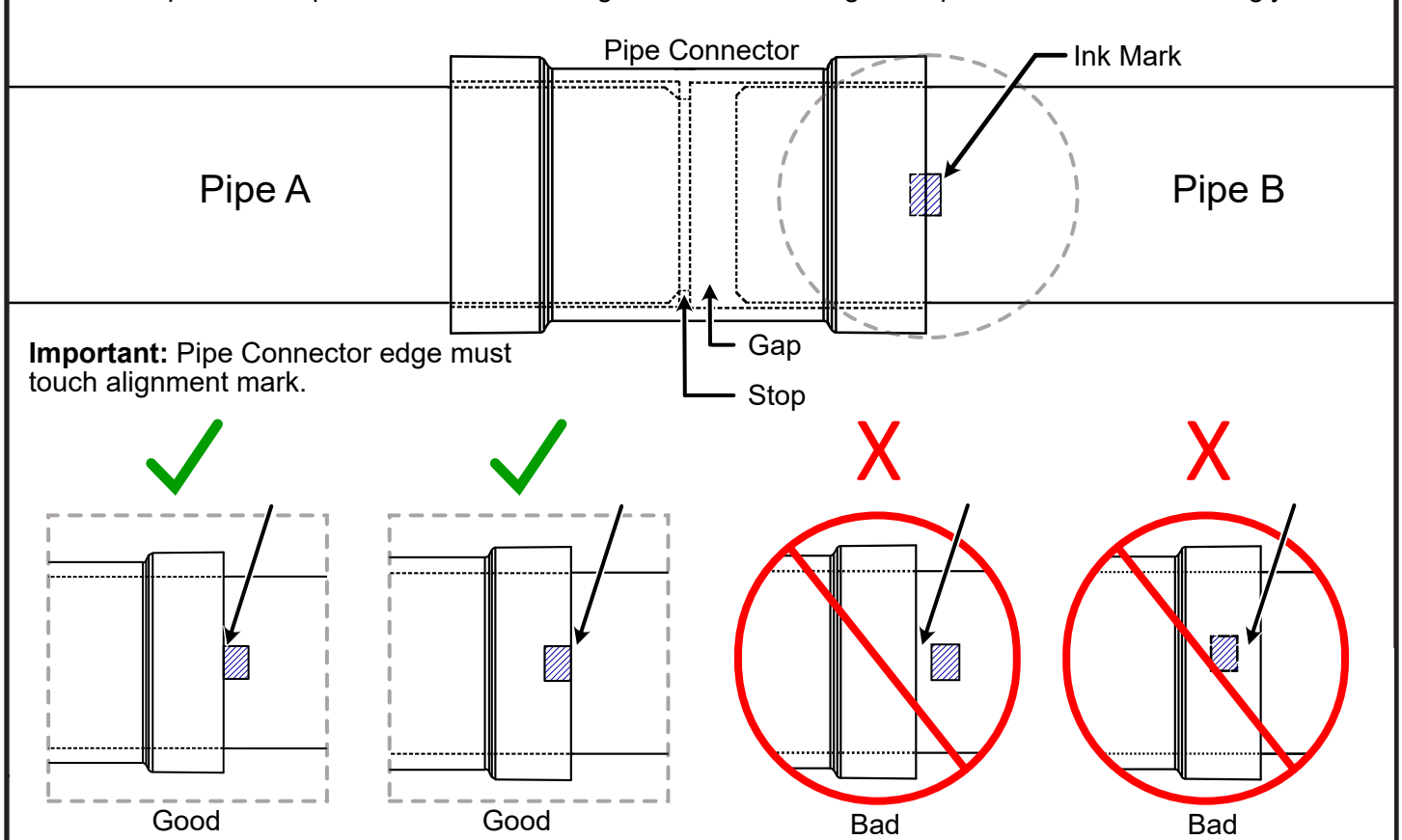


2



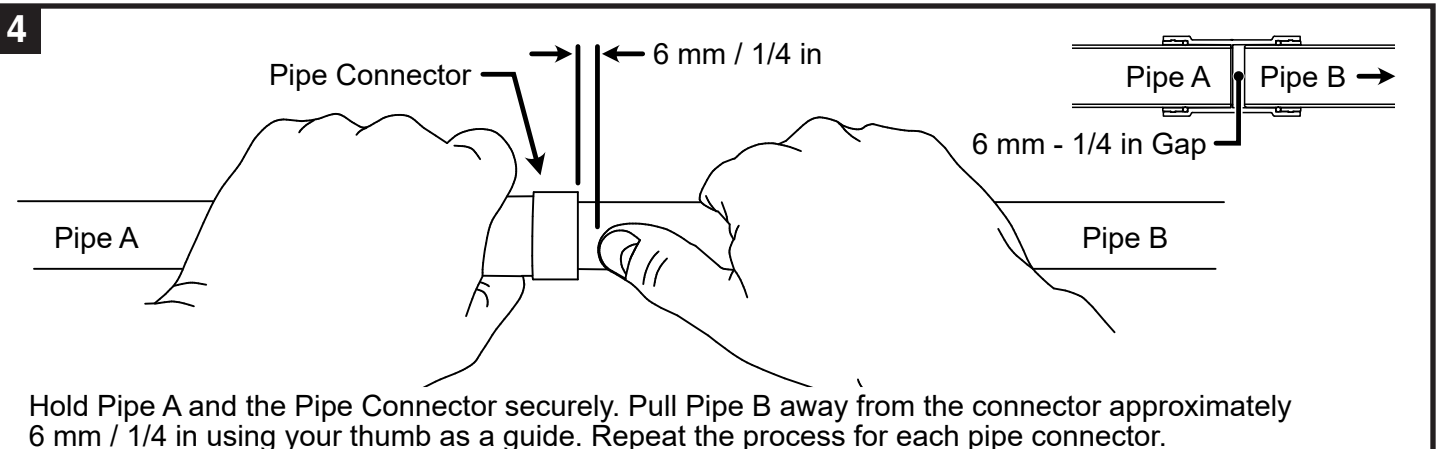
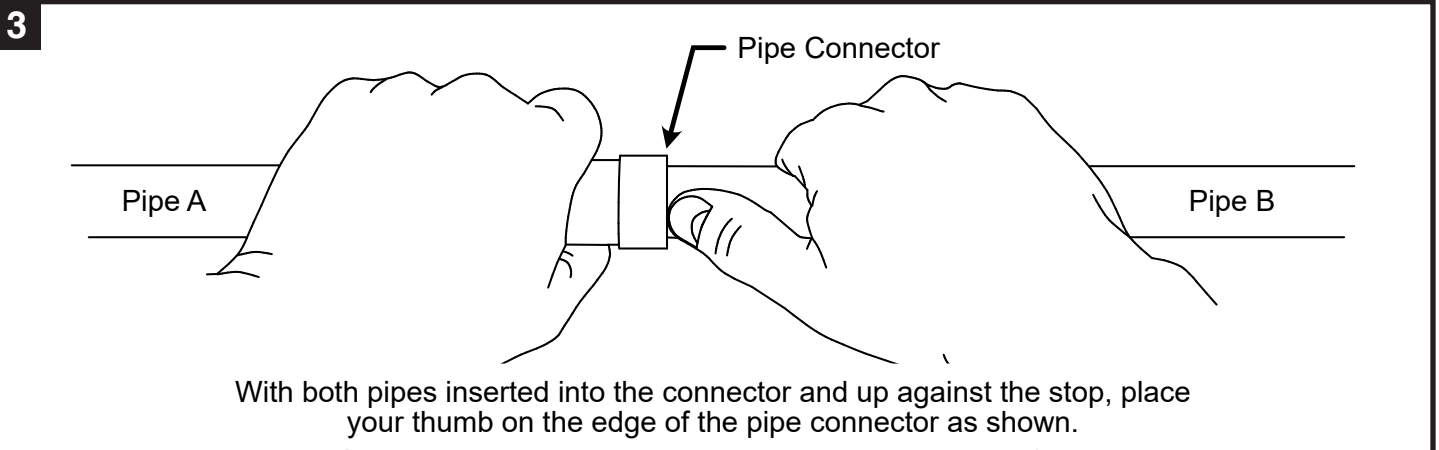
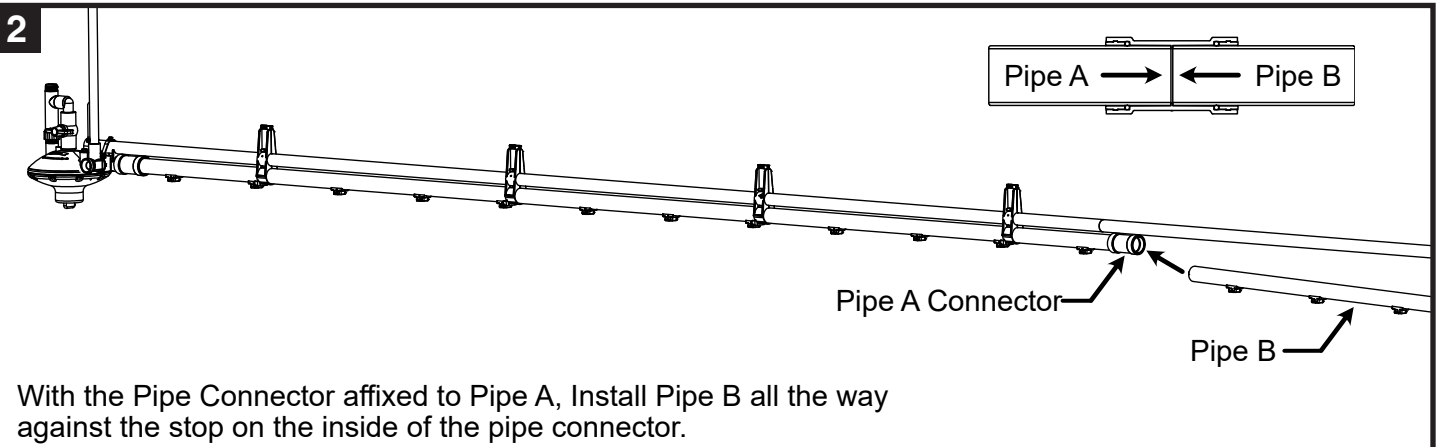
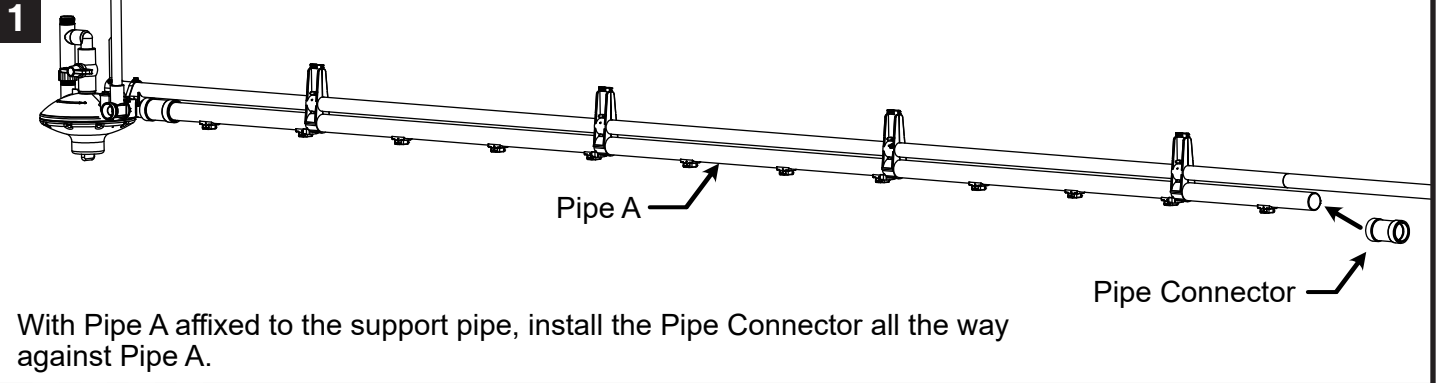
3

Slide Pipe B into Pipe A Connector and align mark with the edge of Pipe A Connector accordingly.

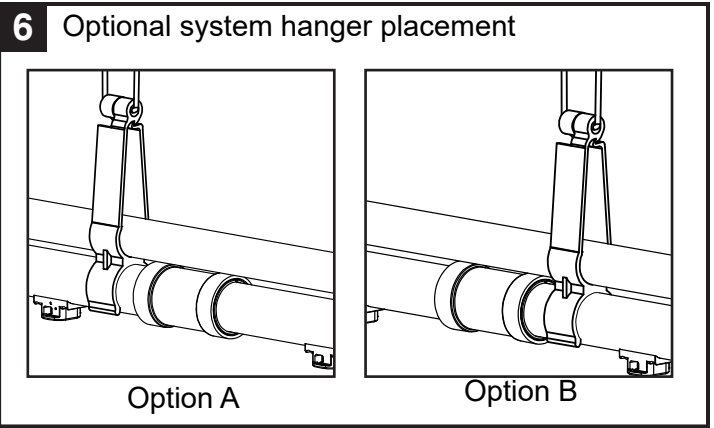
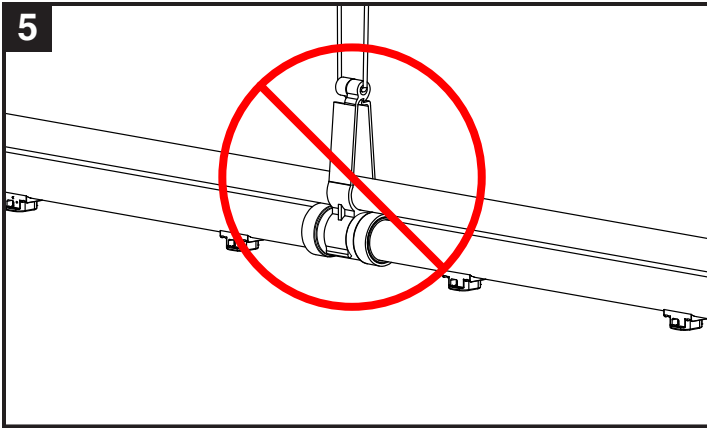


## PIPE GAPPING WITHOUT INK MARK ON PIPE

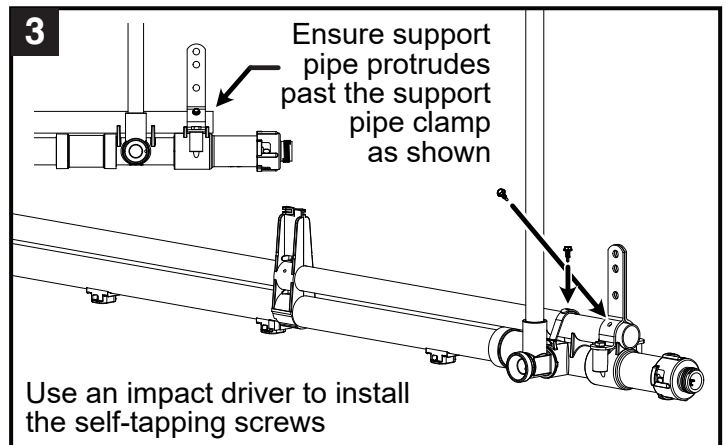
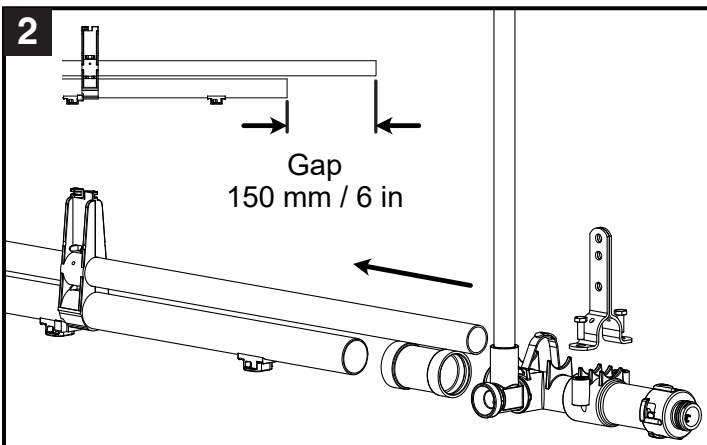
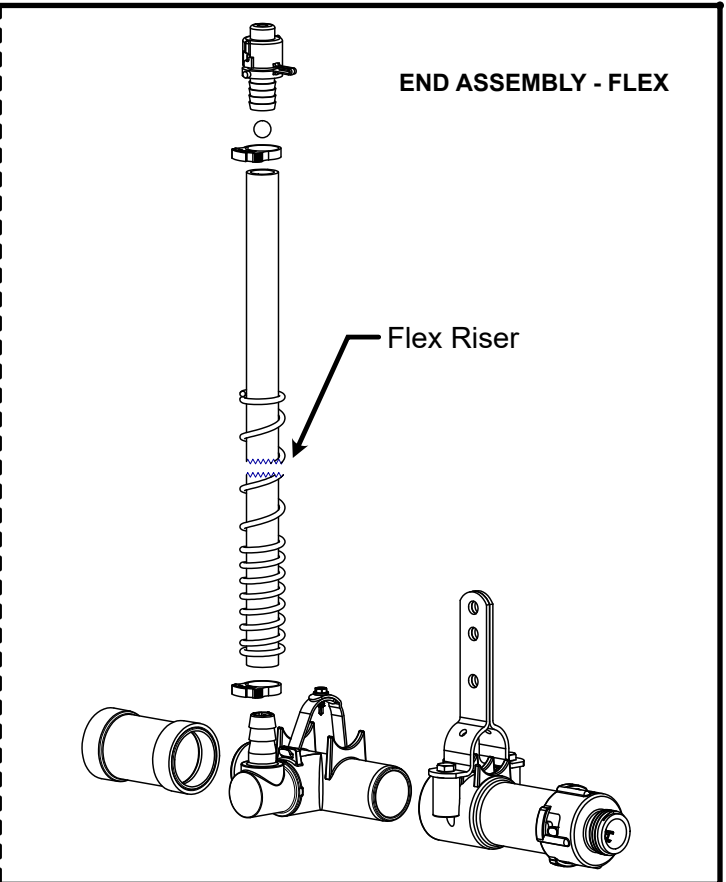
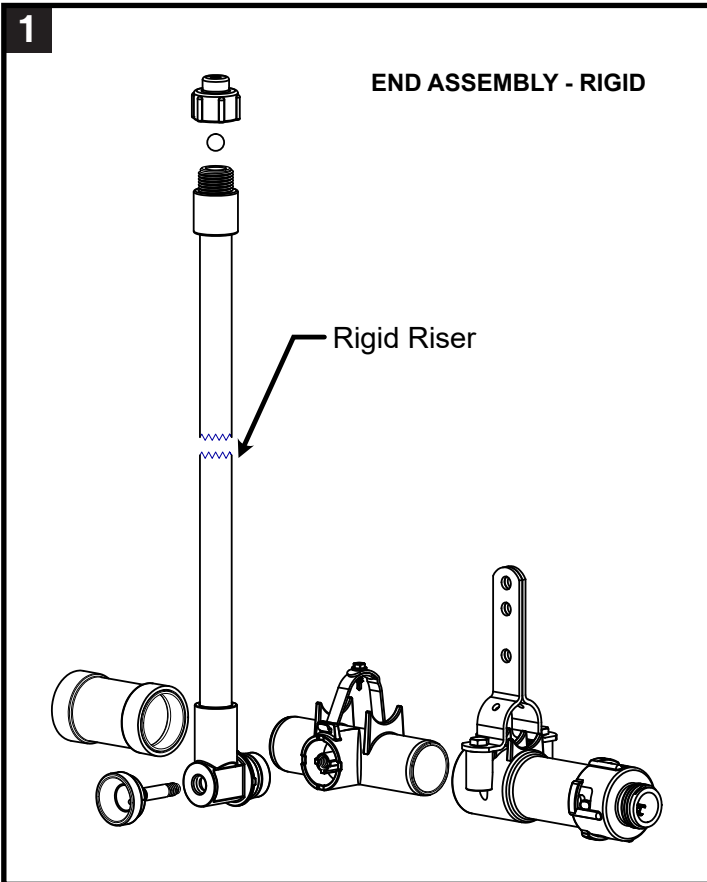
**WARNING:** All Ziggity pipes must be installed in the manner shown in order to accommodate pipe expansion and contractions as a result of temperature changes. Failure to do so will cause pipe snaking or separation.



## PIPE CONNECTOR



## NUVO™ FLUSH END & RISER ASSEMBLY - BIG ACE, BIG Z, 1 IN PVC SYSTEMS



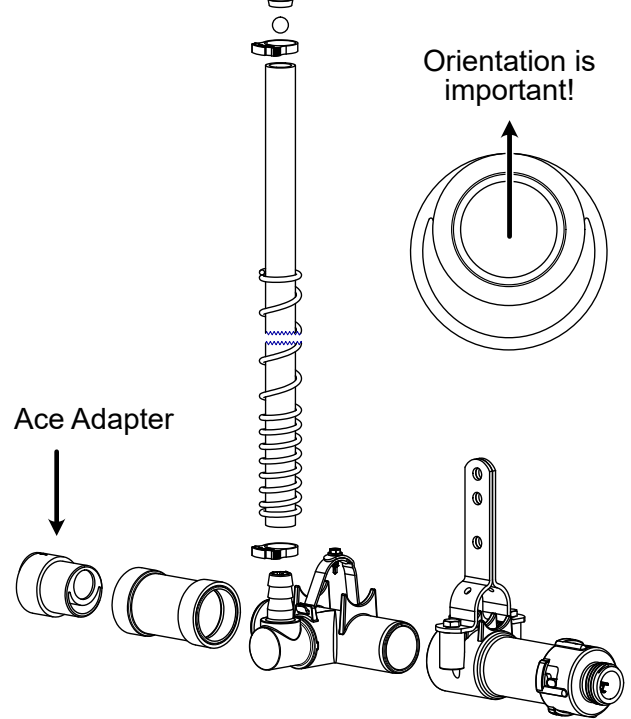
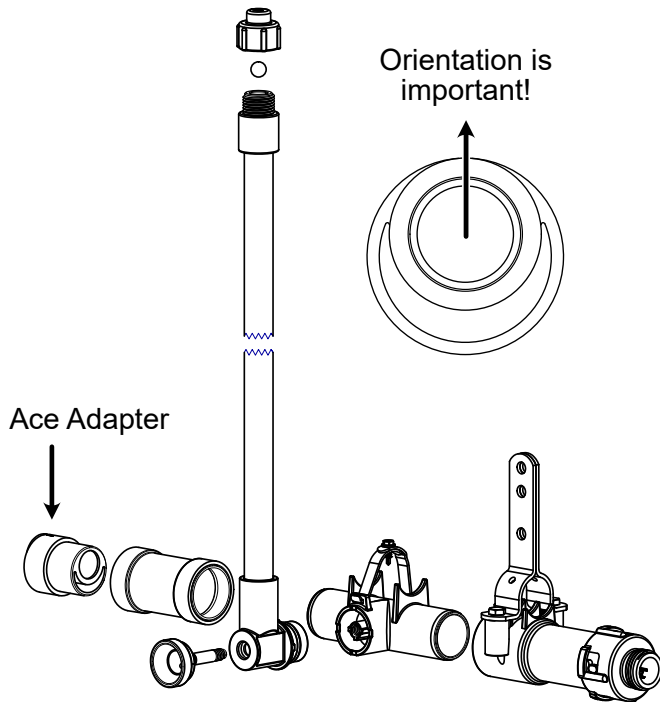
**Note:** Illustrations show Rigid Riser Assemblies. Also applies to Flex Riser Assemblies.

# NUVO™ FLUSH END & RISER ASSEMBLY - ACE SYSTEM

1

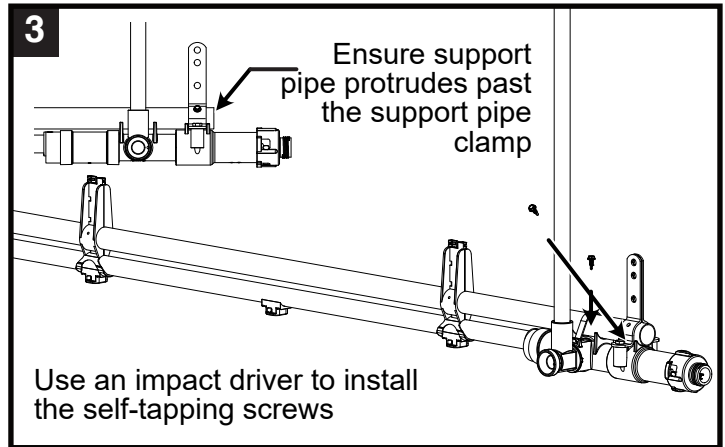
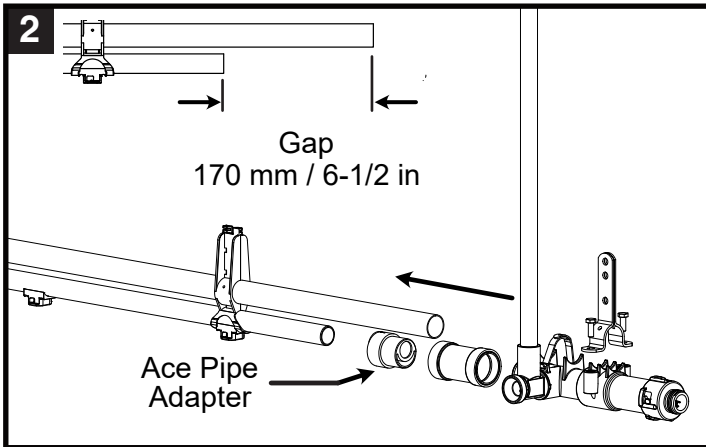
## END ASSEMBLY - RIGID

## END ASSEMBLY - FLEX

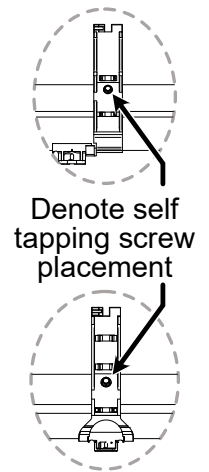
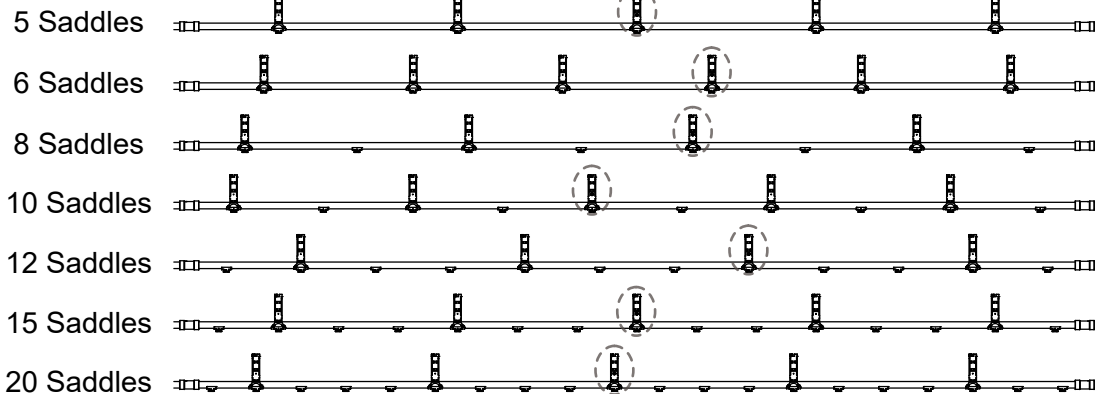


2

3



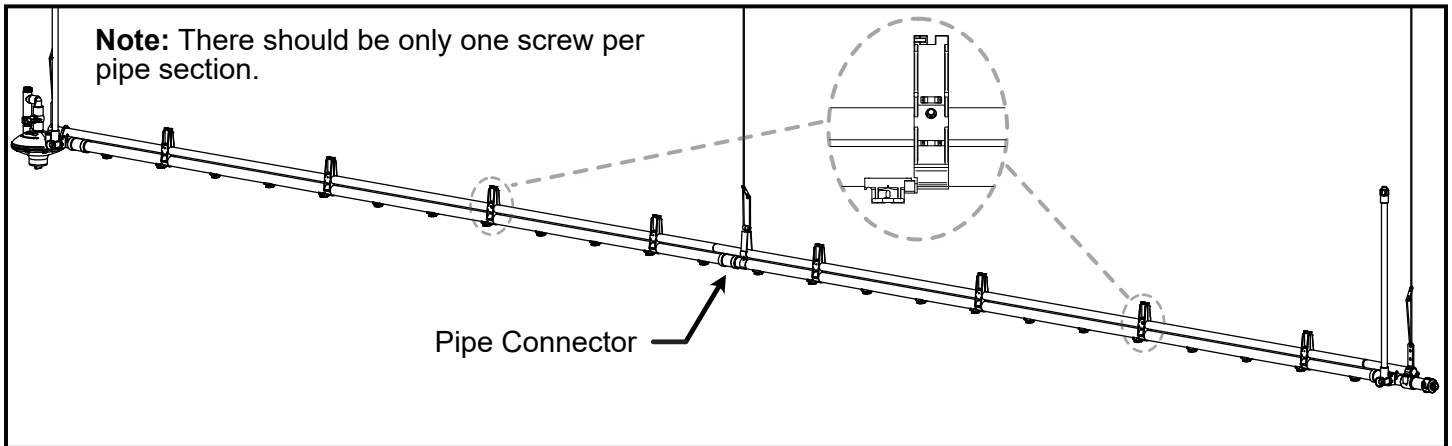
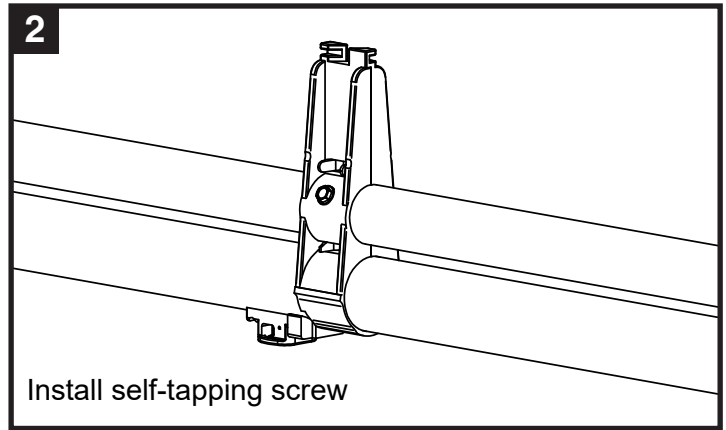
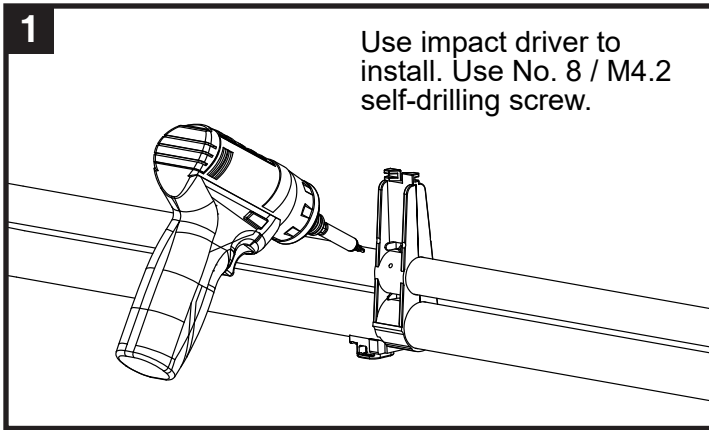
## SCREW PLACEMENT FOR CLIP-ON BRACKETS



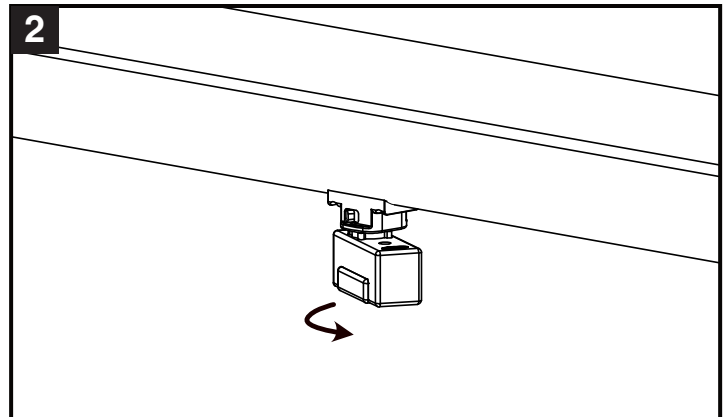
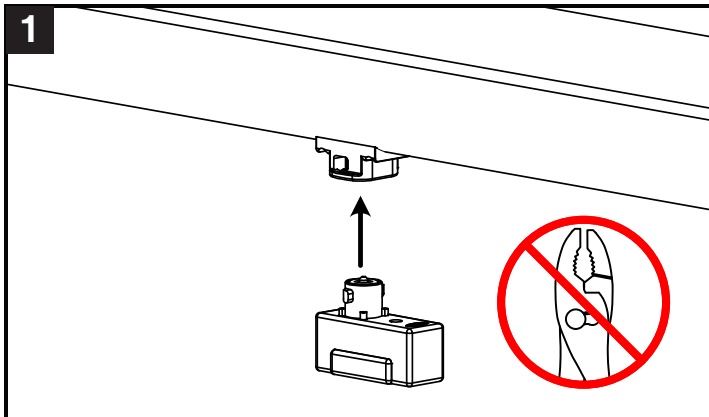
Installation of screw at key locations prevents plastic pipe from migrating on support pipe.

**Note:** Illustrations show Rigid Riser Assemblies. Also applies to Flex Riser Assemblies.

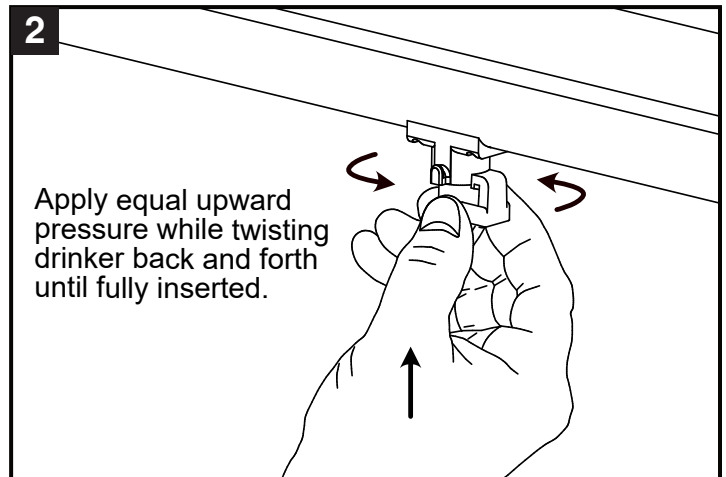
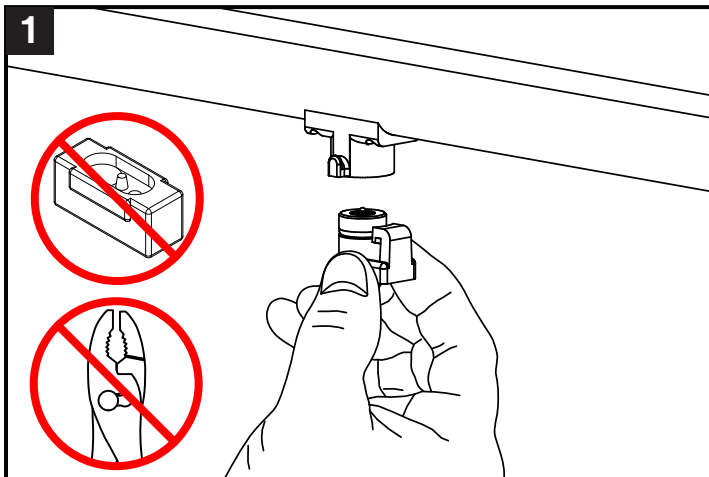
## CLIP-ON BRACKET SCREW



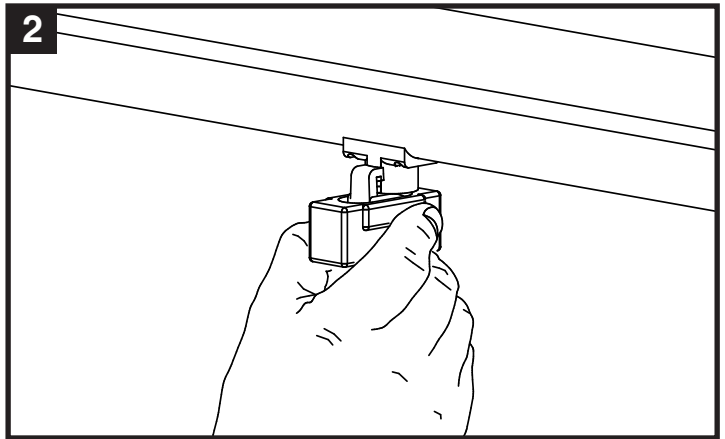
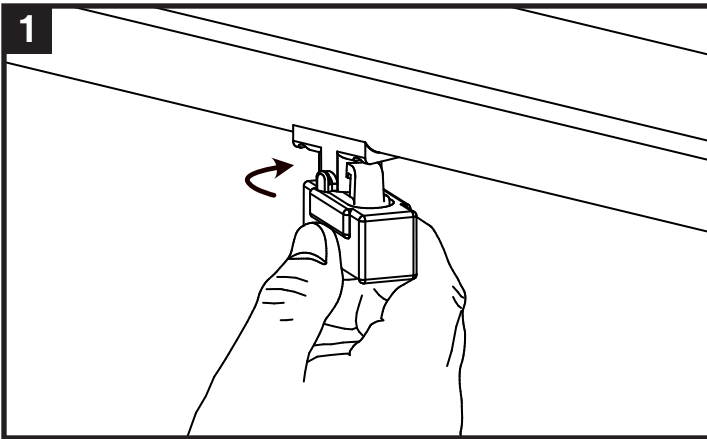
## TWIN LOCK DRINKER



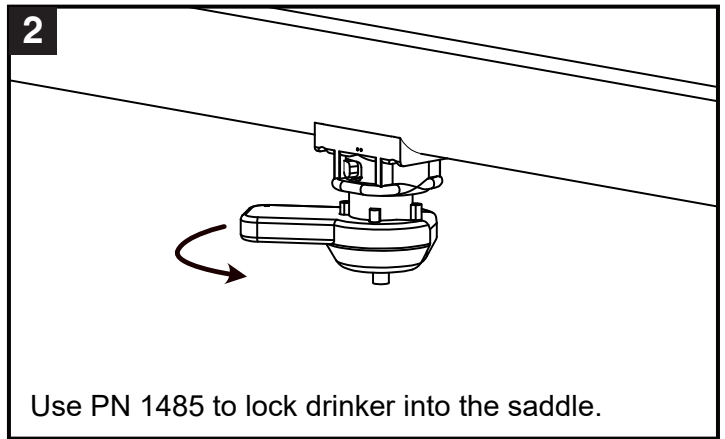
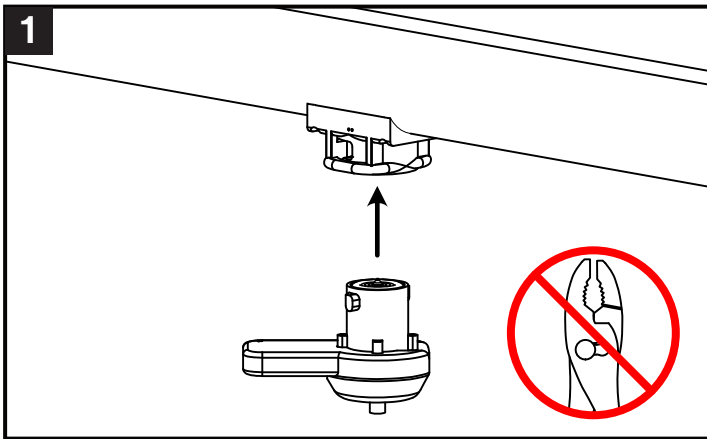
## AKTIVE DRINKER



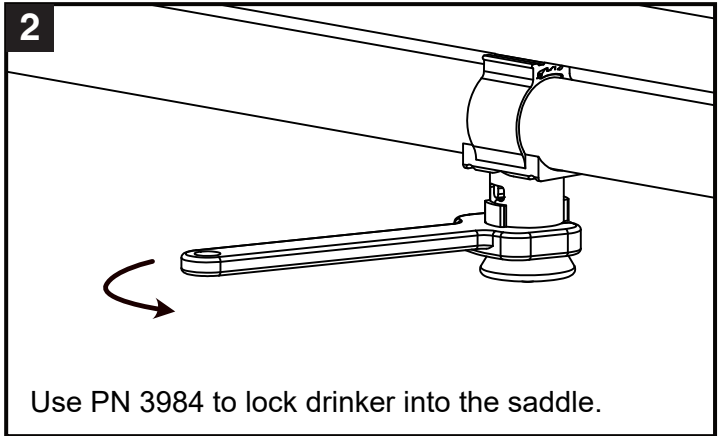
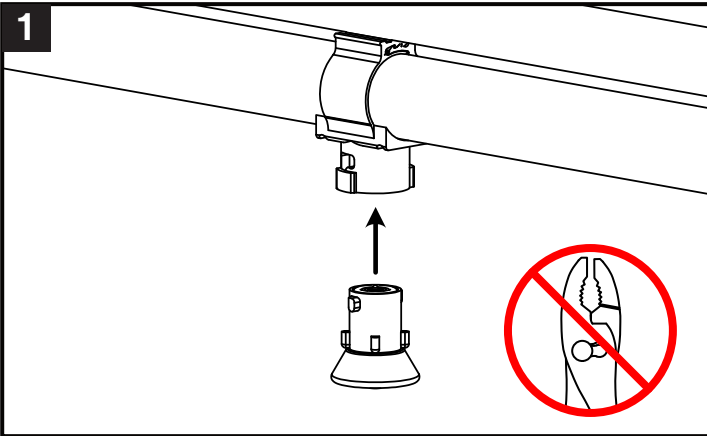
## AKTIVE DRINKER



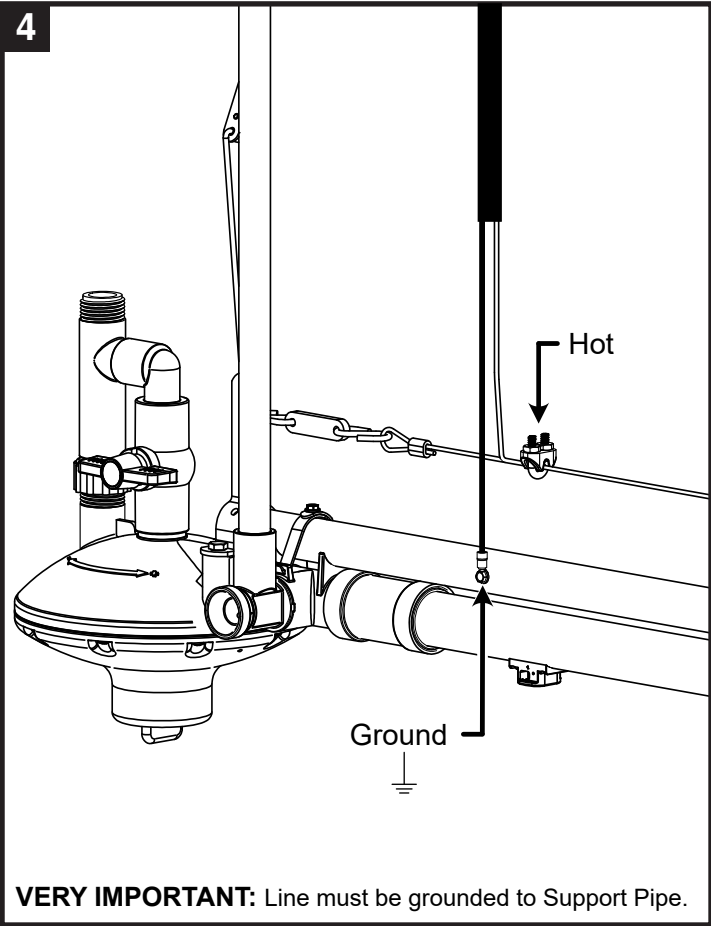
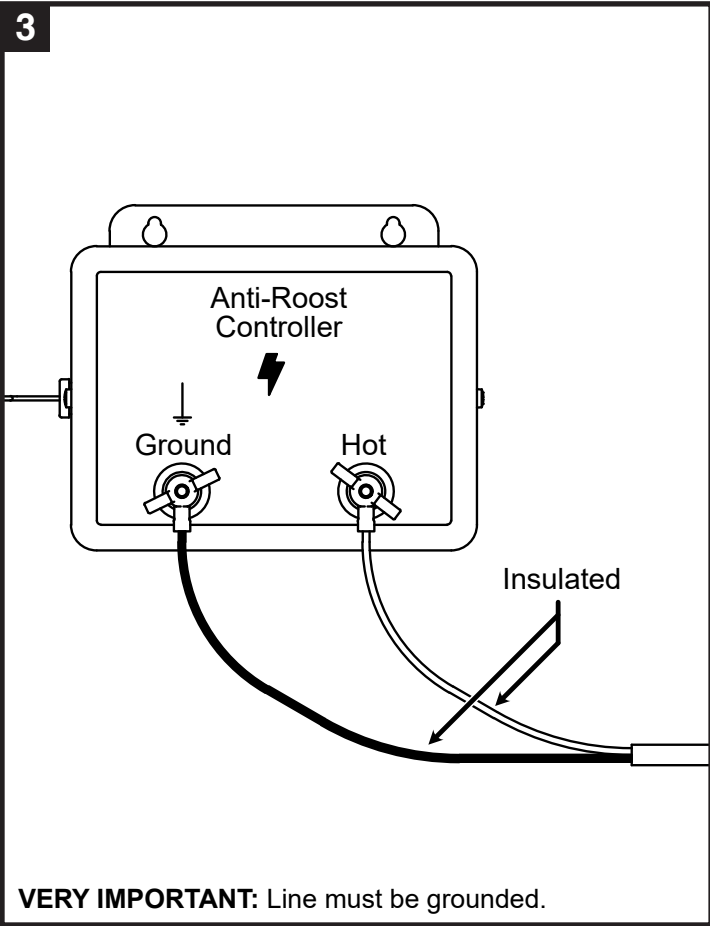
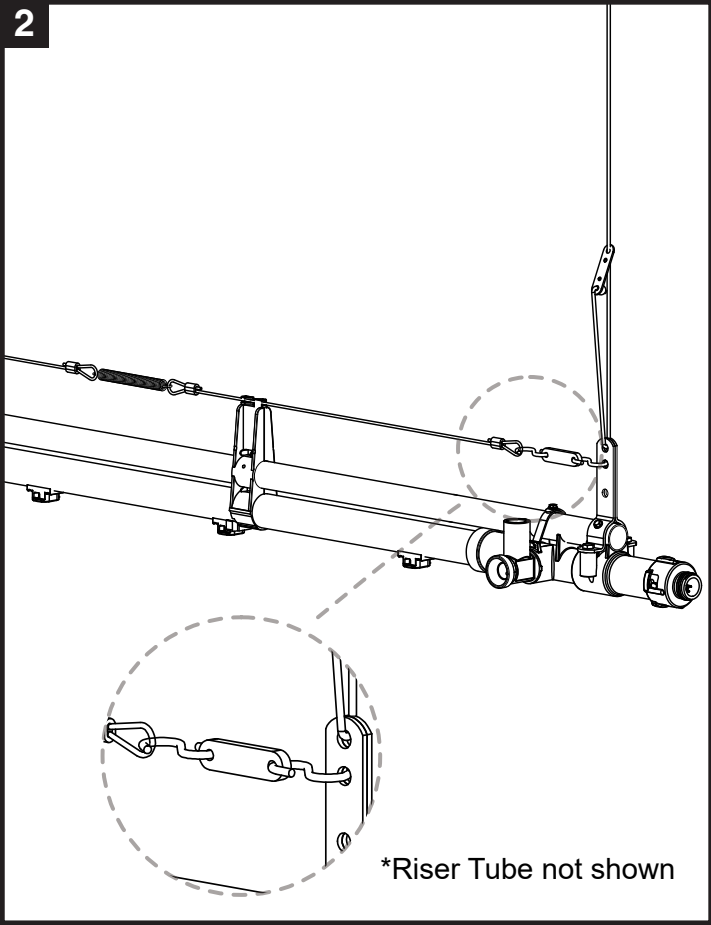
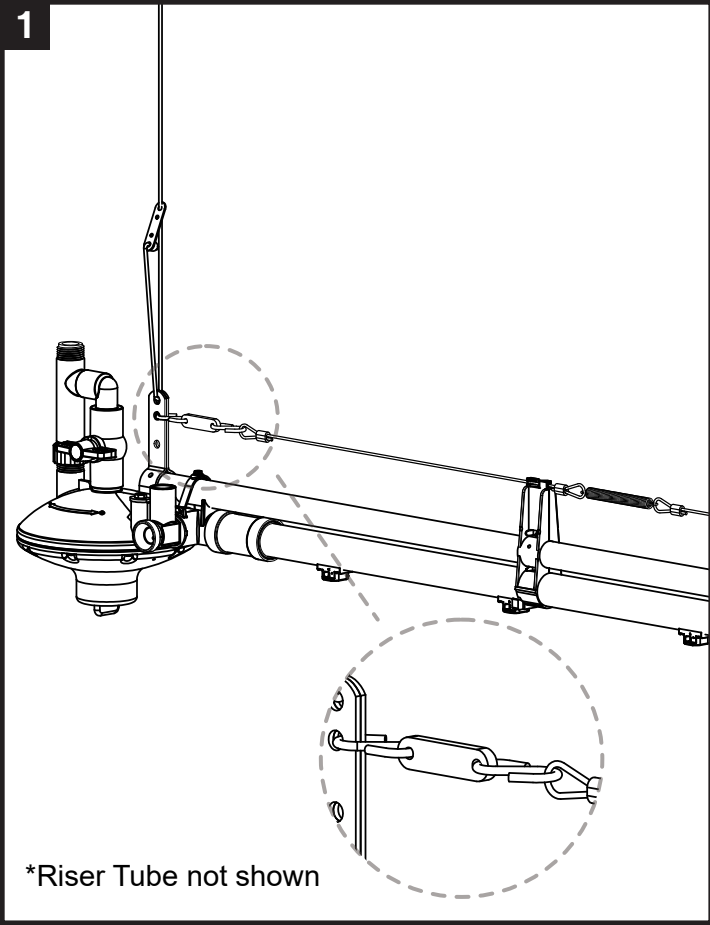
## BIG Z DRINKER



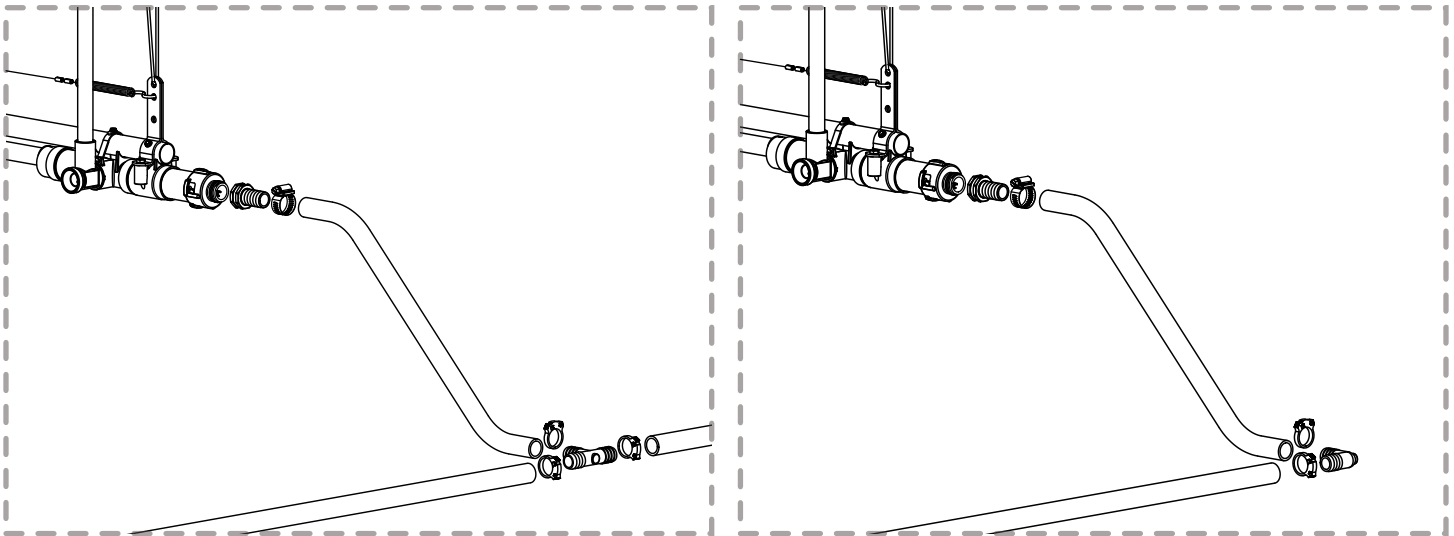
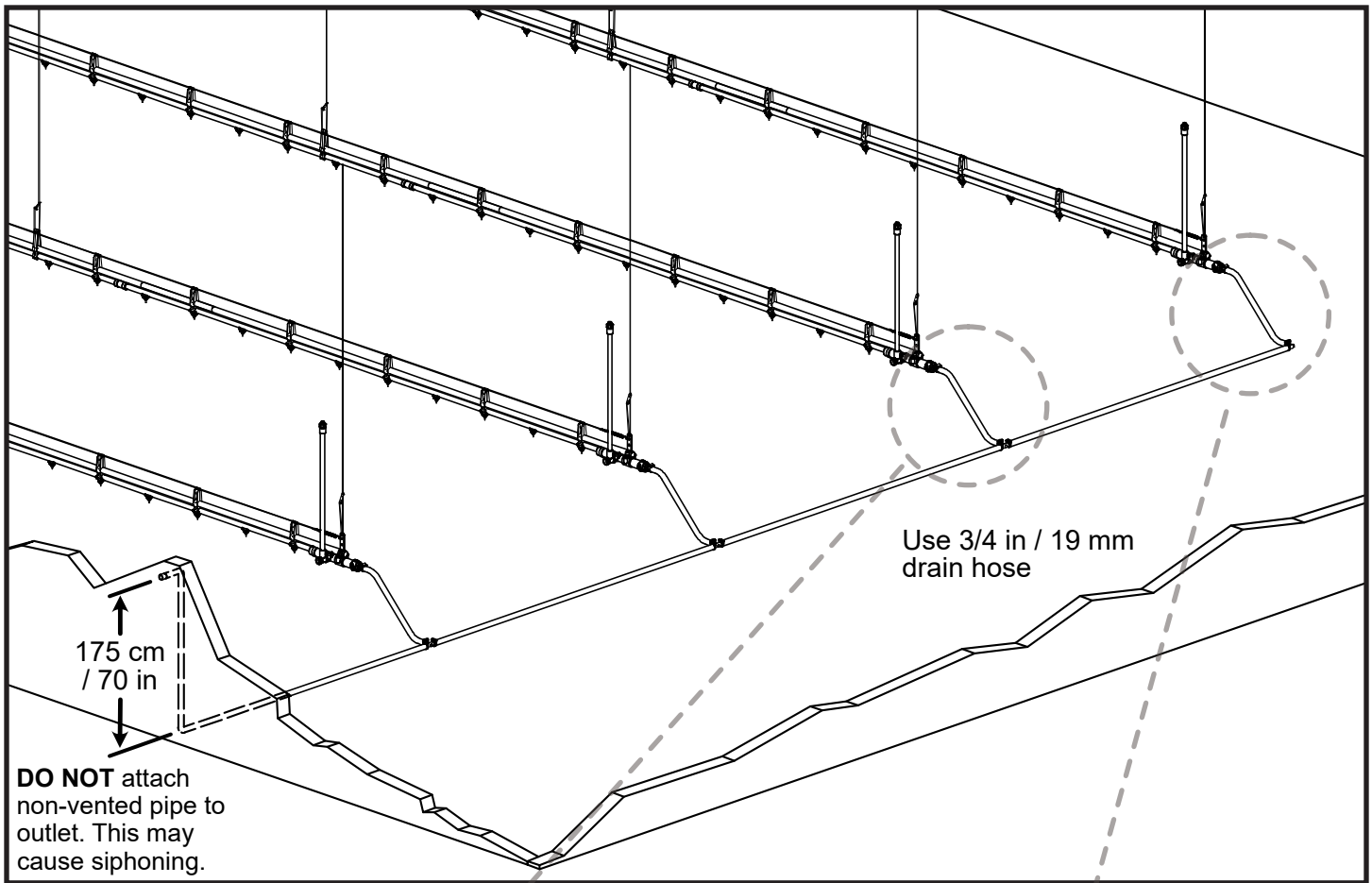
## BIG Z SHIELDED DRINKER (CLIP-ON SADDLE)



ANTI-ROOST CABLE



## DRAIN HOSE



**Note:** Illustrations show Rigid Riser Assemblies. Also applies to Flex Riser Assemblies.

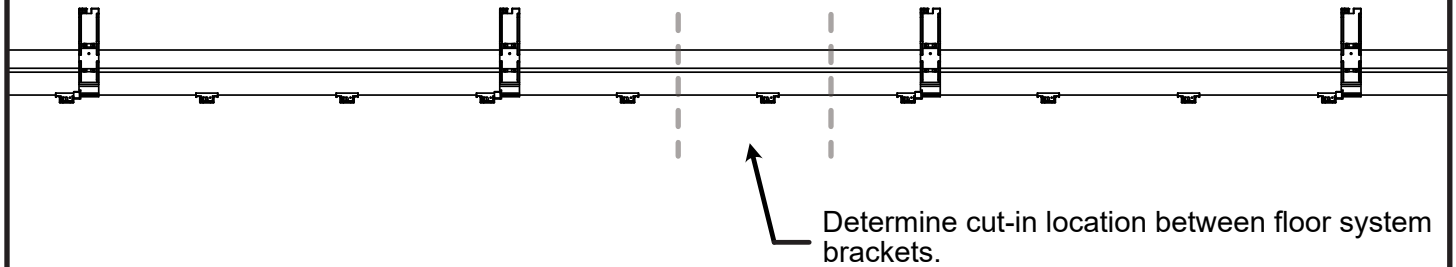


# Optional Equipment

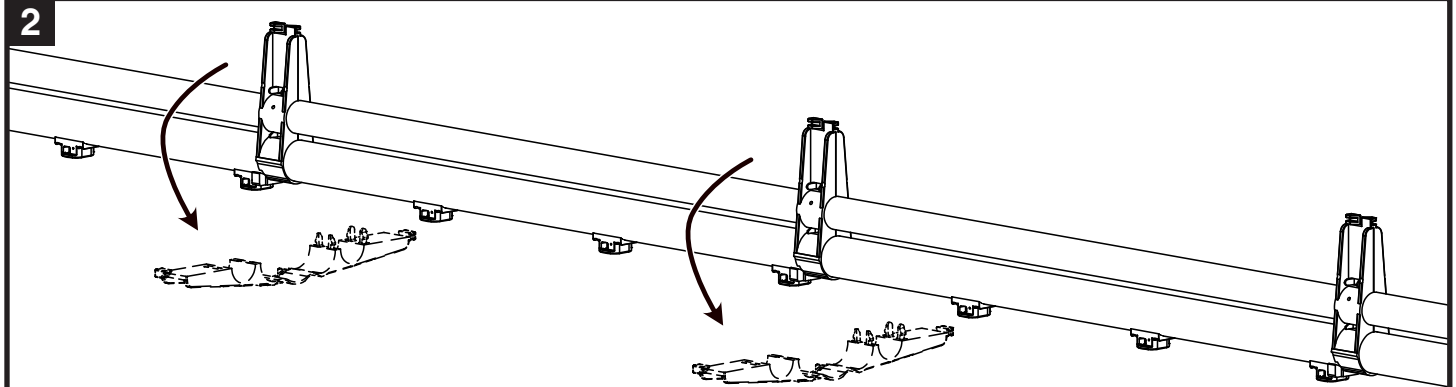
## INLINE RISER ASSEMBLY - BIG ACE, BIG Z, 1 IN PVC SYSTEMS

1

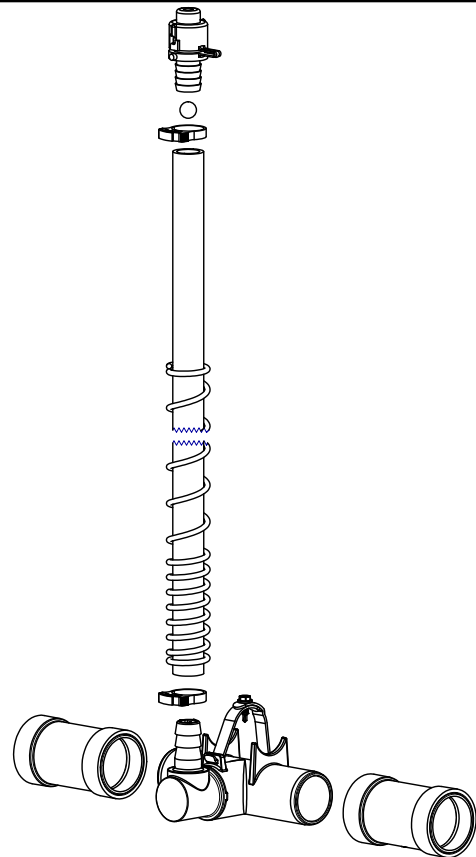
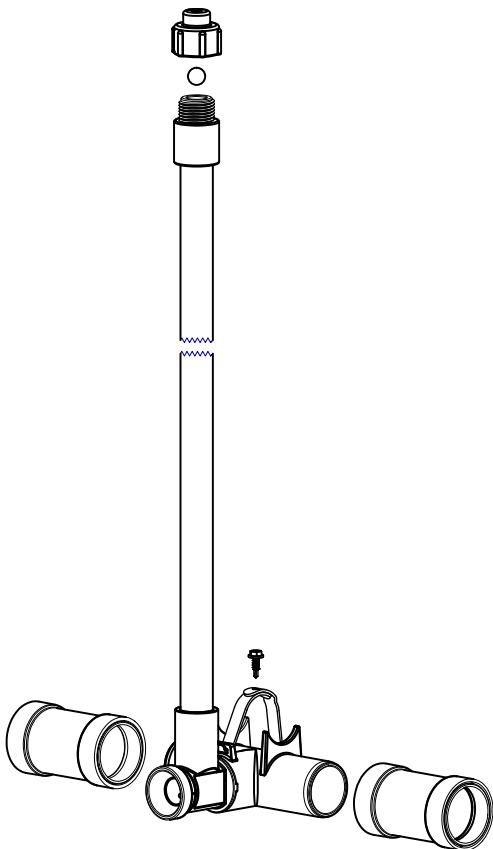
**Note:** Illustrations show Rigid Riser Assemblies. Also applies to Flex Riser Assemblies.



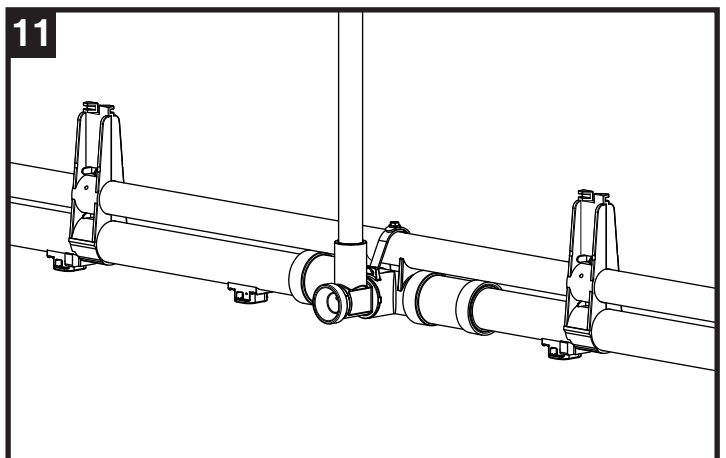
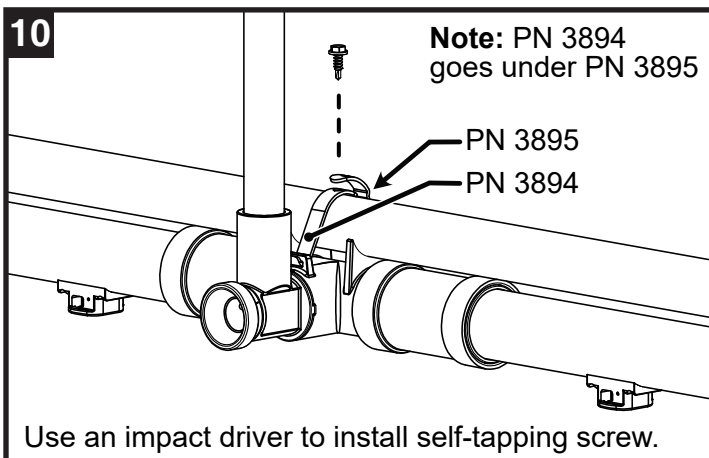
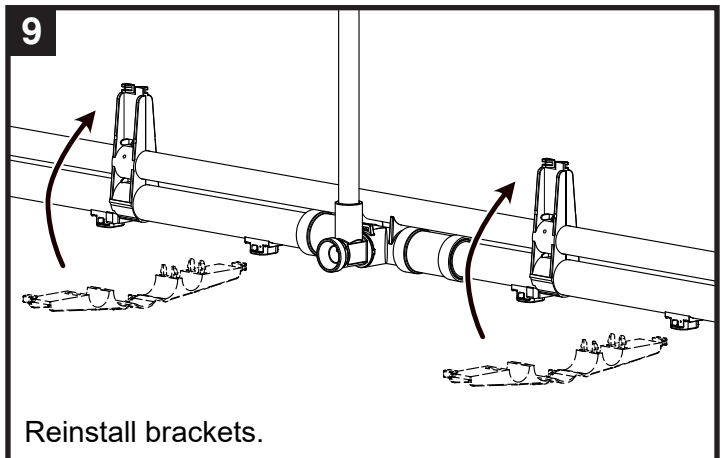
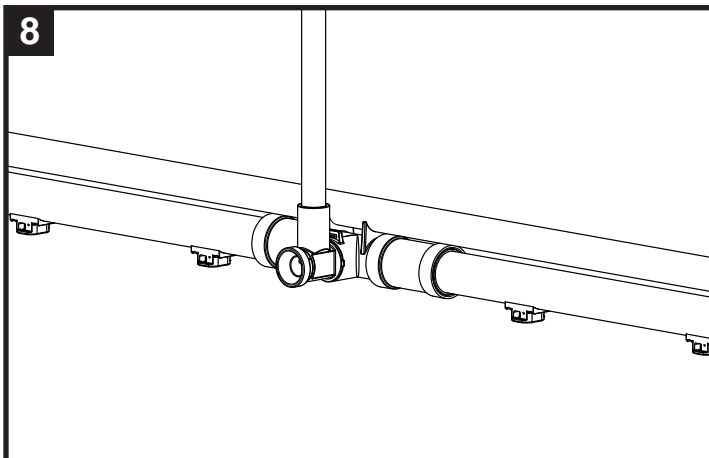
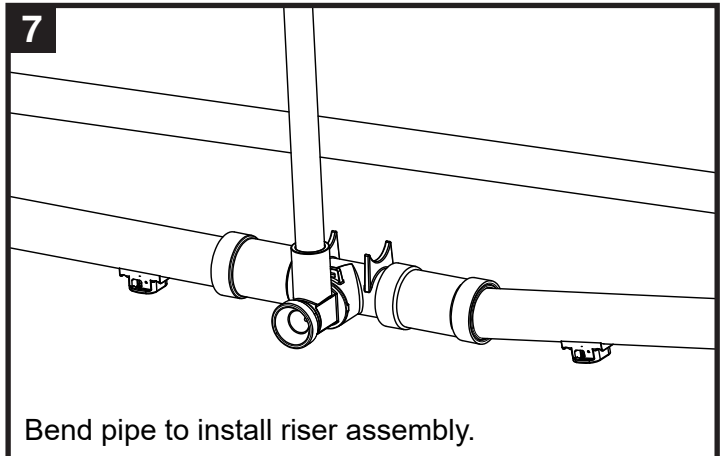
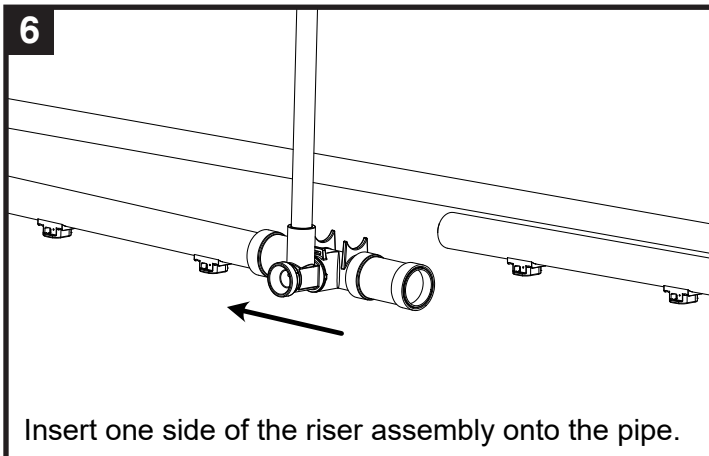
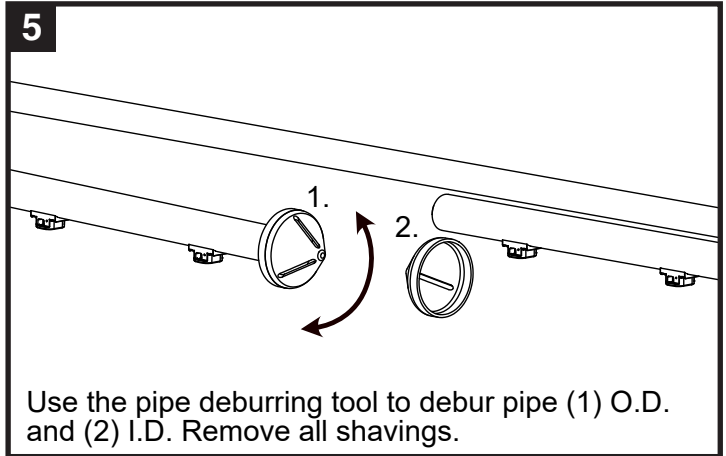
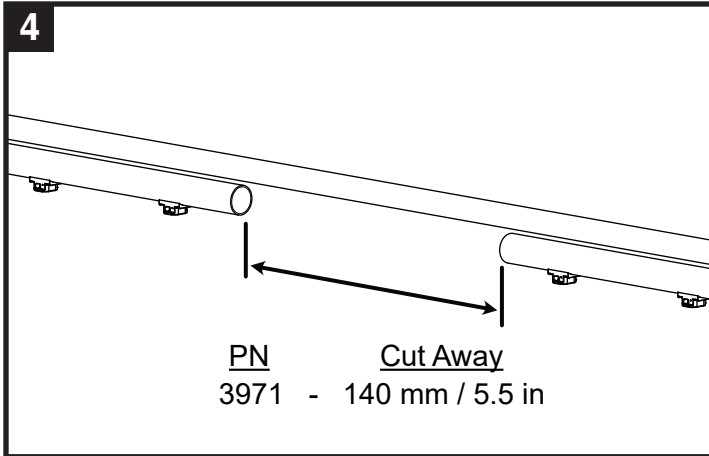
2



3



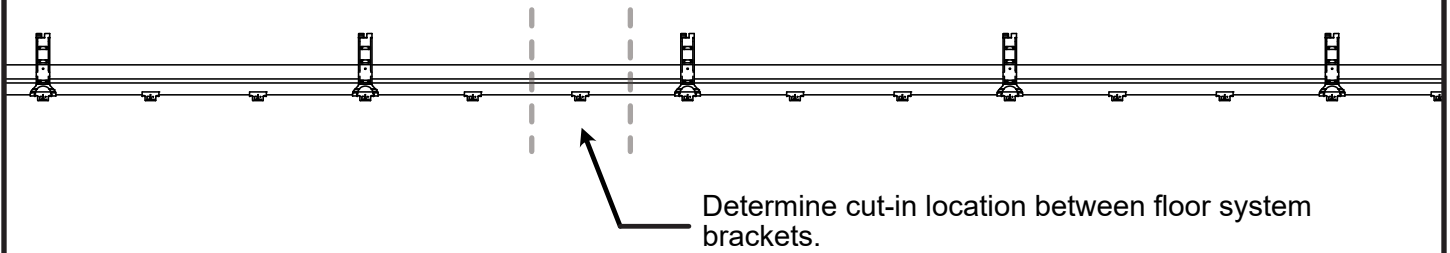
## INLINE RISER ASSEMBLY - BIG ACE, BIG Z, 1 IN PVC SYSTEMS



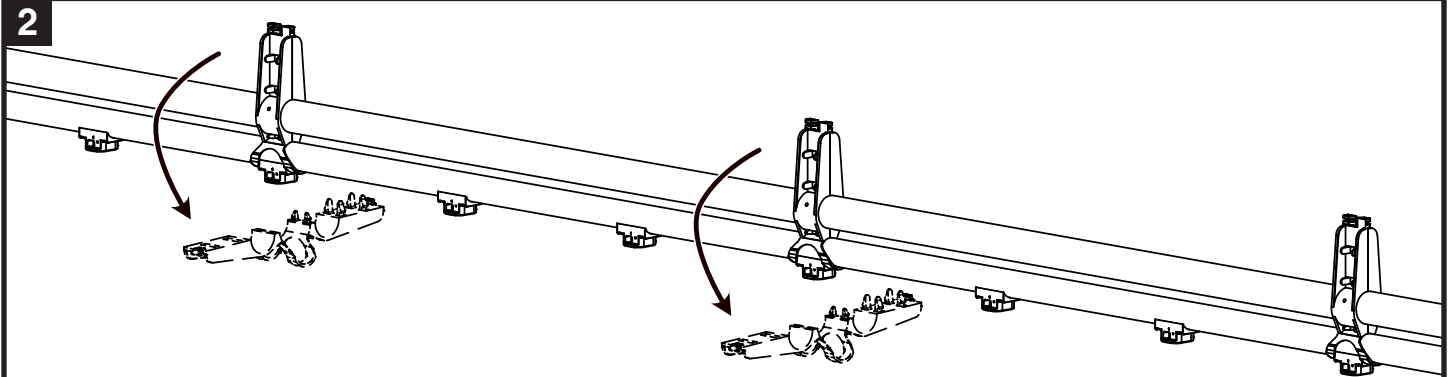
## INLINE RISER ASSEMBLY - ACE SYSTEM

1

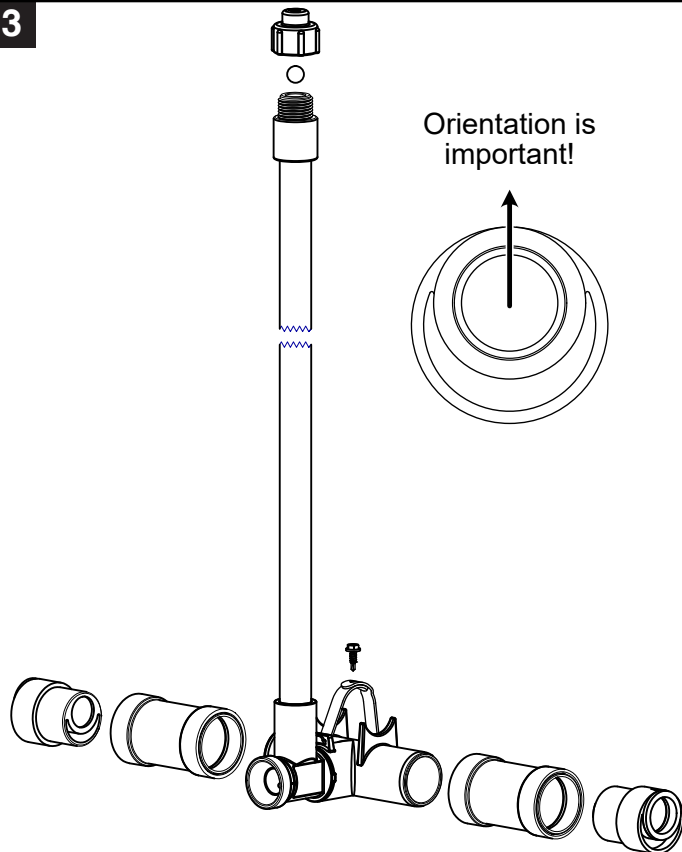
**Note:** Illustrations show Rigid Riser Assemblies. Also applies to Flex Riser Assemblies.



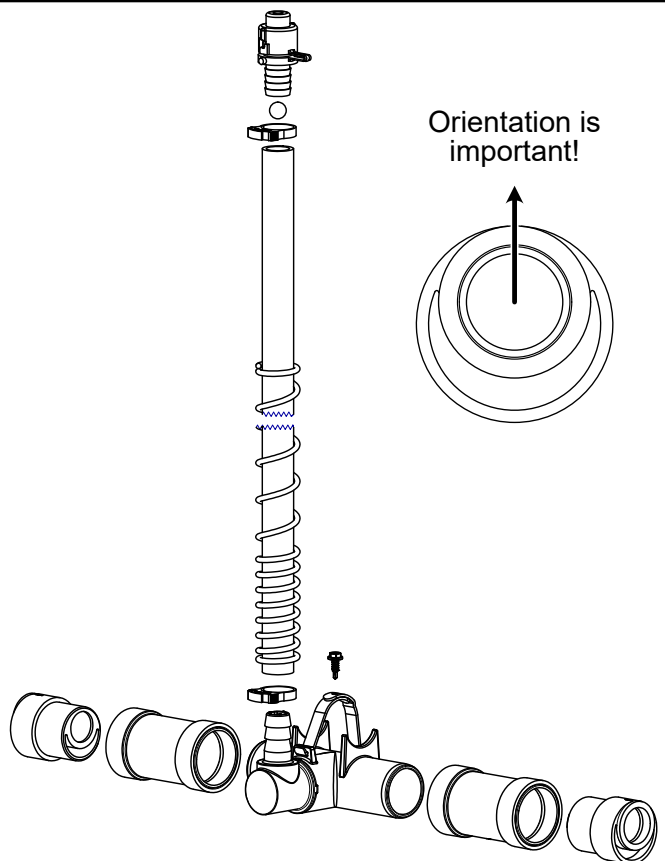
2



3

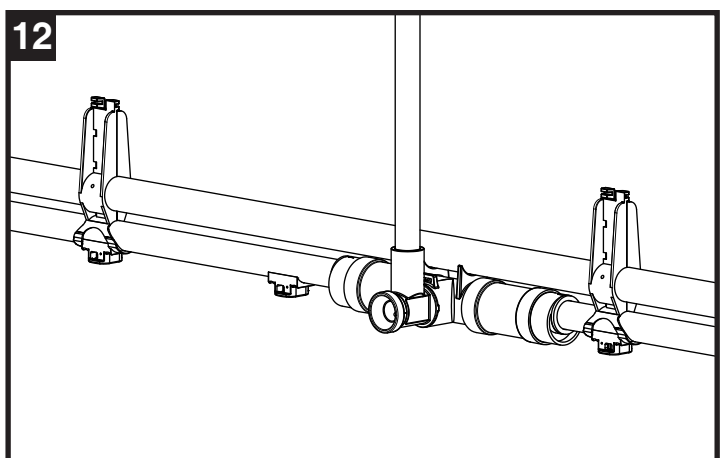
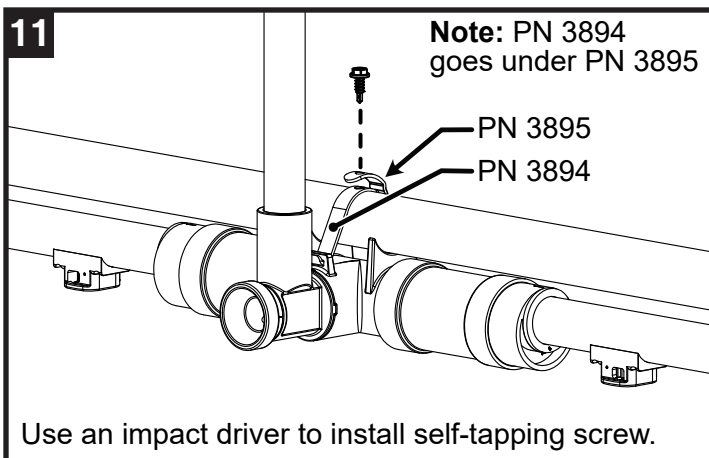
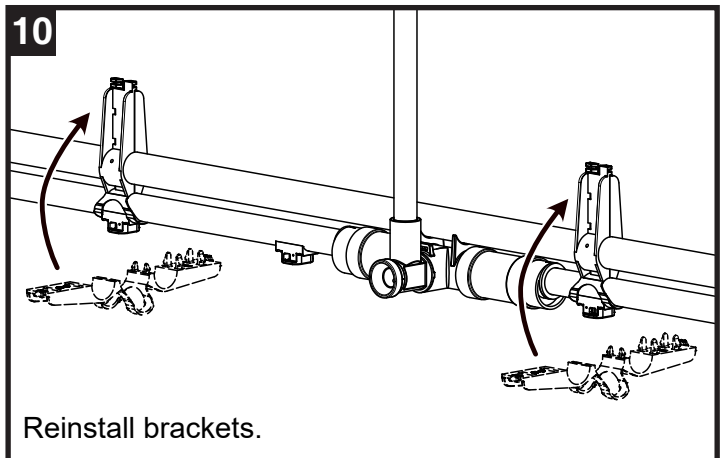
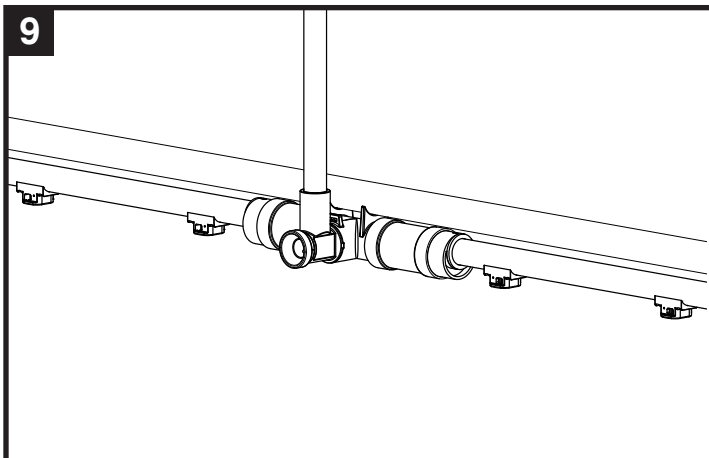
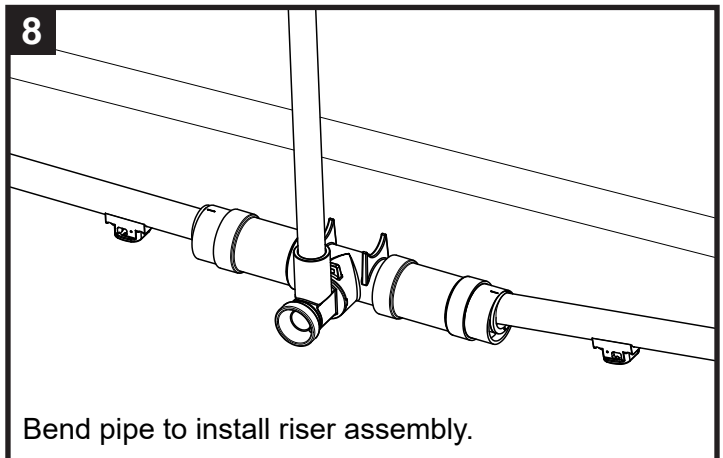
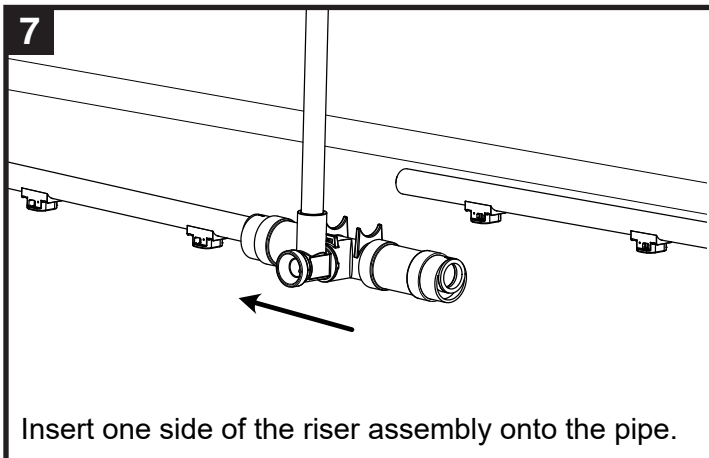
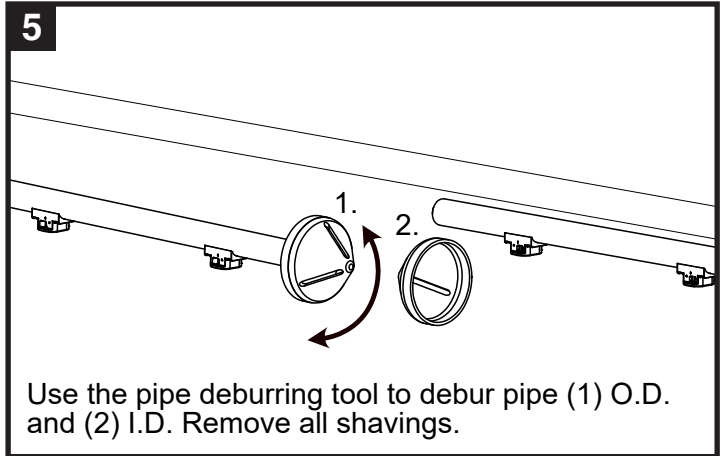
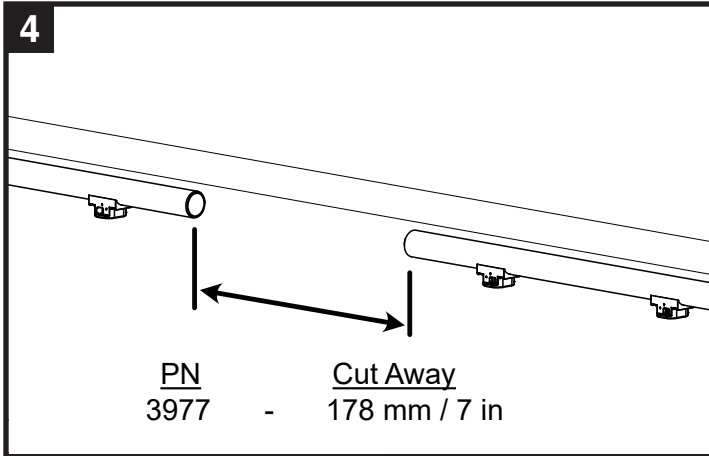


PN 3979 - Riser Assembly: Floor Rigid Ace Inline



PN 3977 - Riser Assembly: Floor Rigid Ace Inline

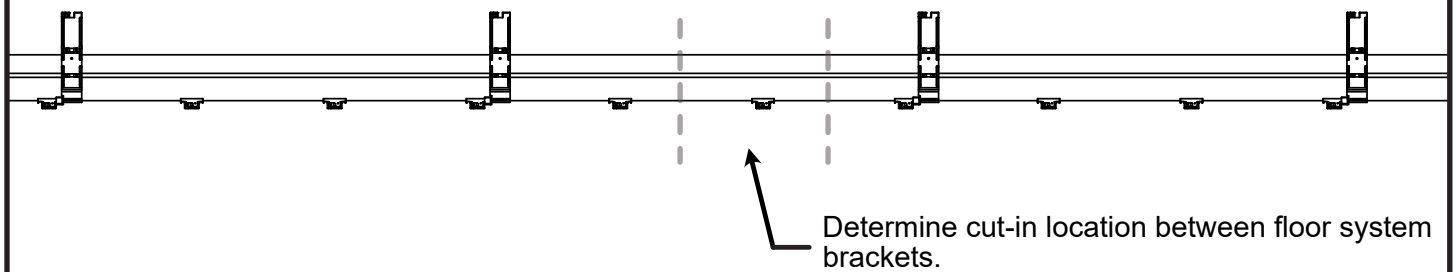
## INLINE RISER ASSEMBLY - ACE SYSTEM



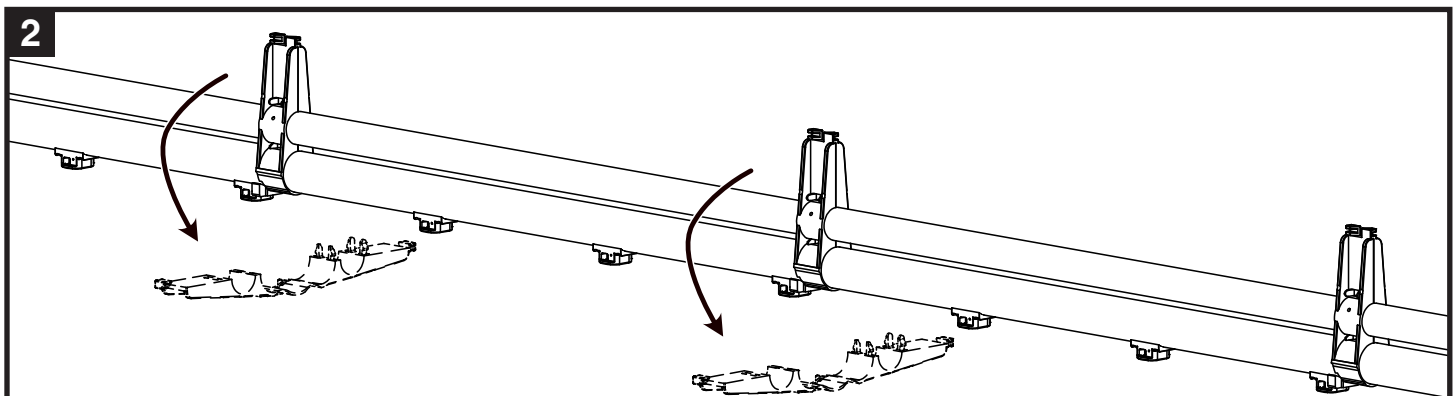
## SHUT OFF ASSEMBLY + INLINE RISER ASSEMBLY: BIG ACE, BIG Z, 1 IN PVC SYSTEMS

1

**Note:** Illustrations show Rigid Riser Assemblies. Also applies to Flex Riser Assemblies.

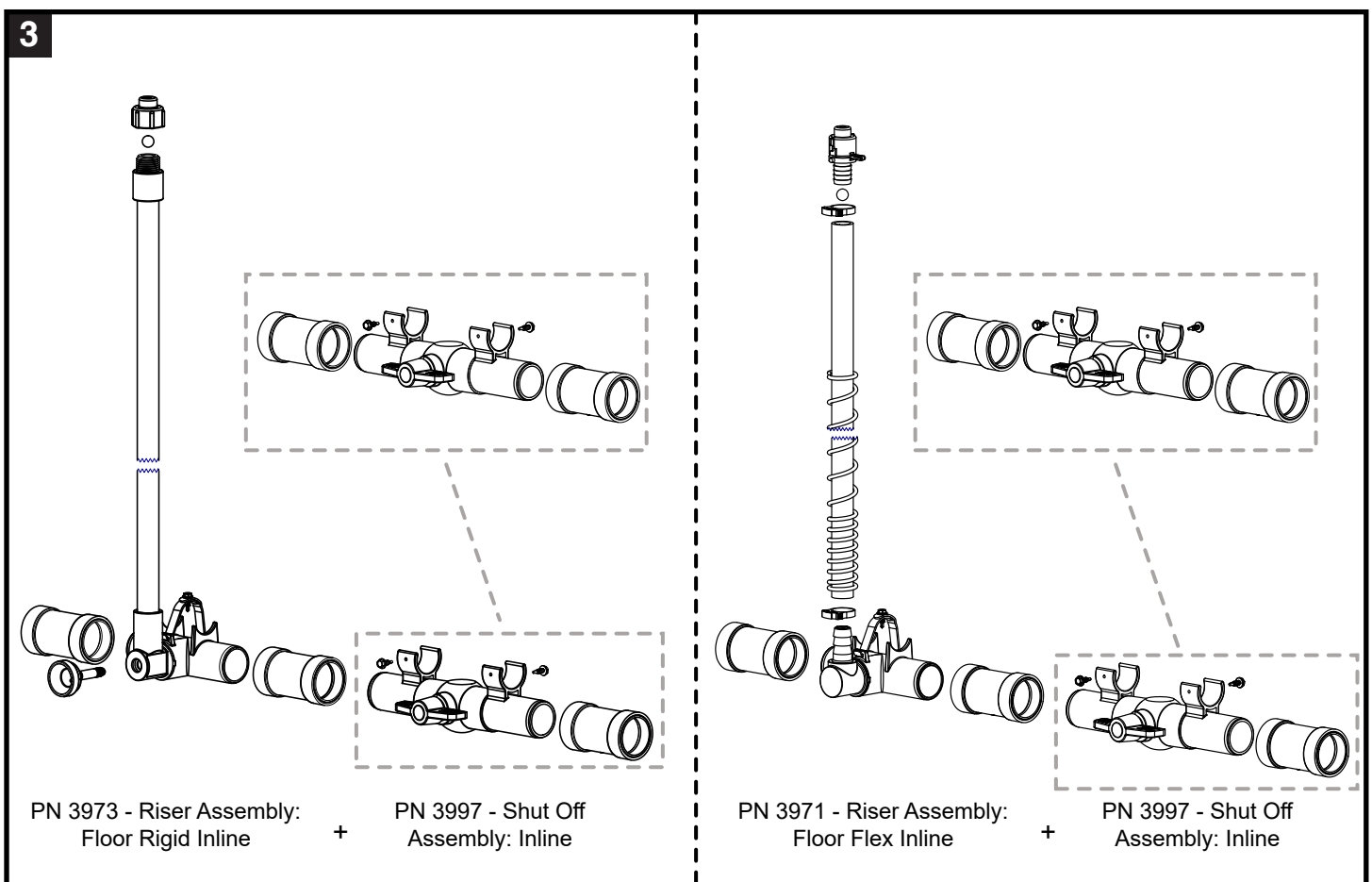


2

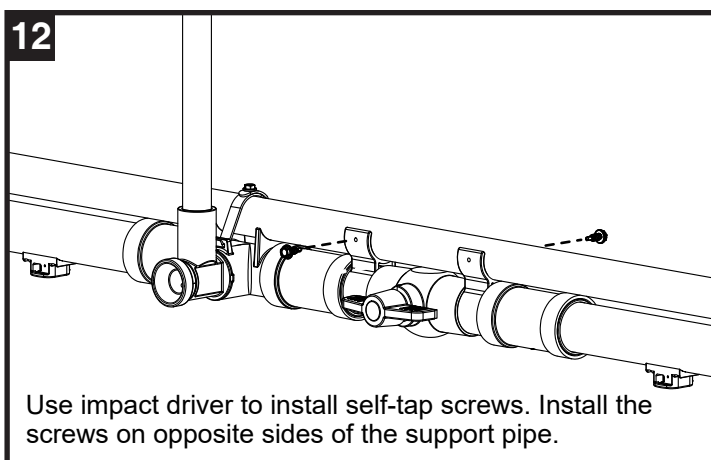
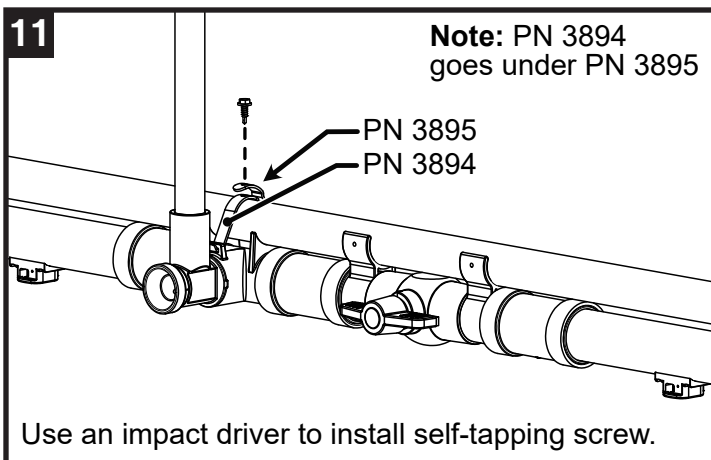
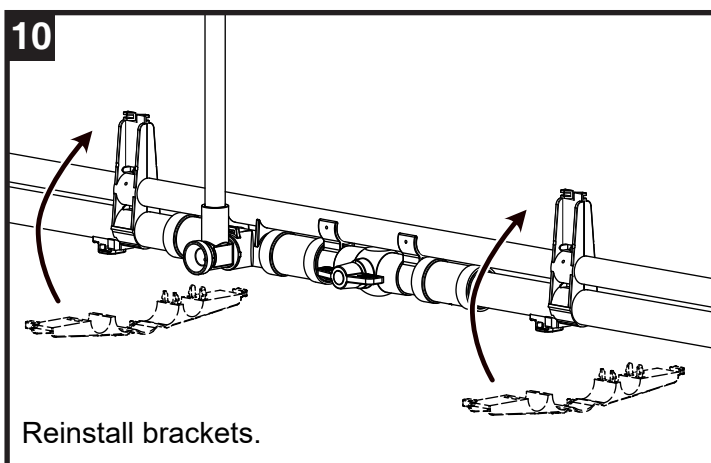
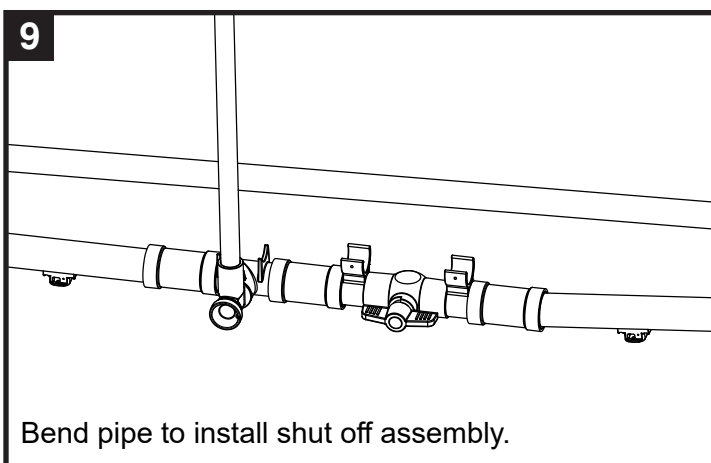
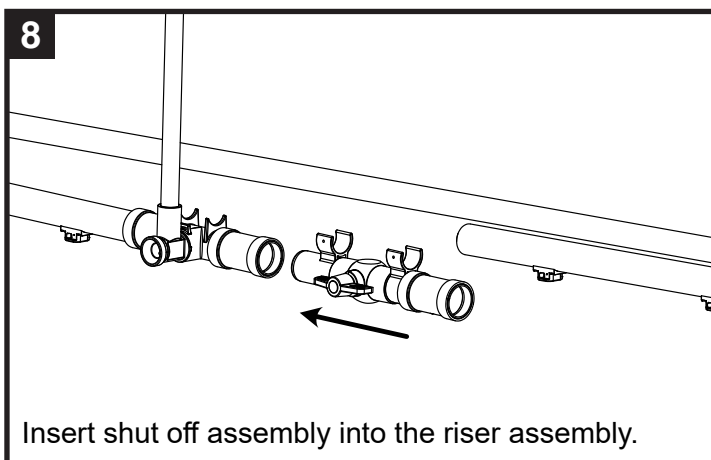
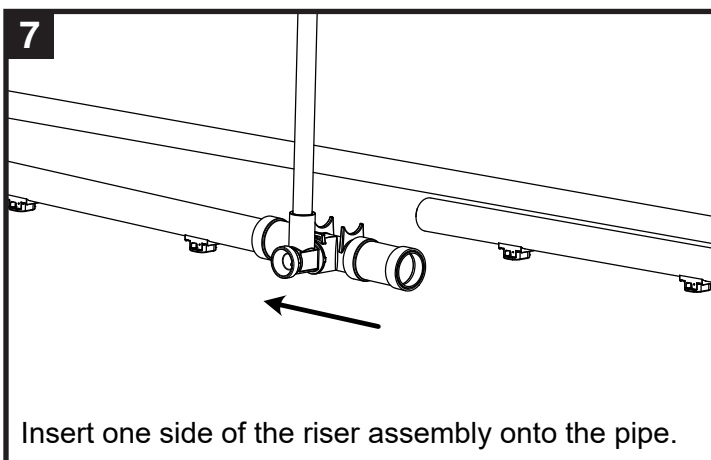
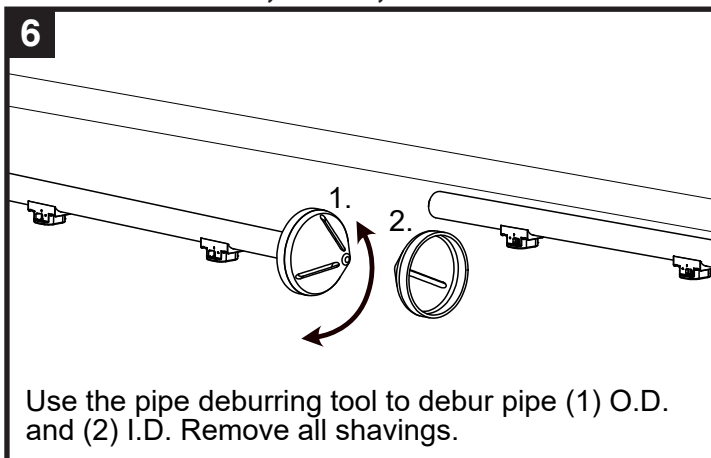
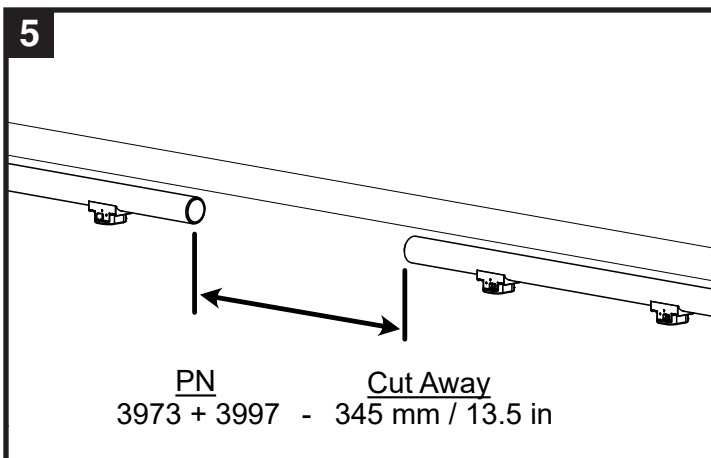


Remove brackets.

3



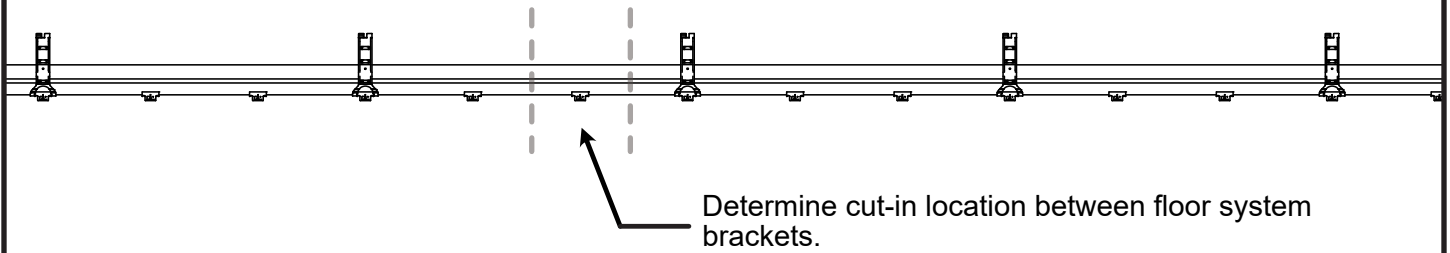
# SHUT-OFF ASSEMBLY + INLINE RISER ASSEMBLY: BIG ACE, BIG Z, 1 IN PVC SYSTEMS



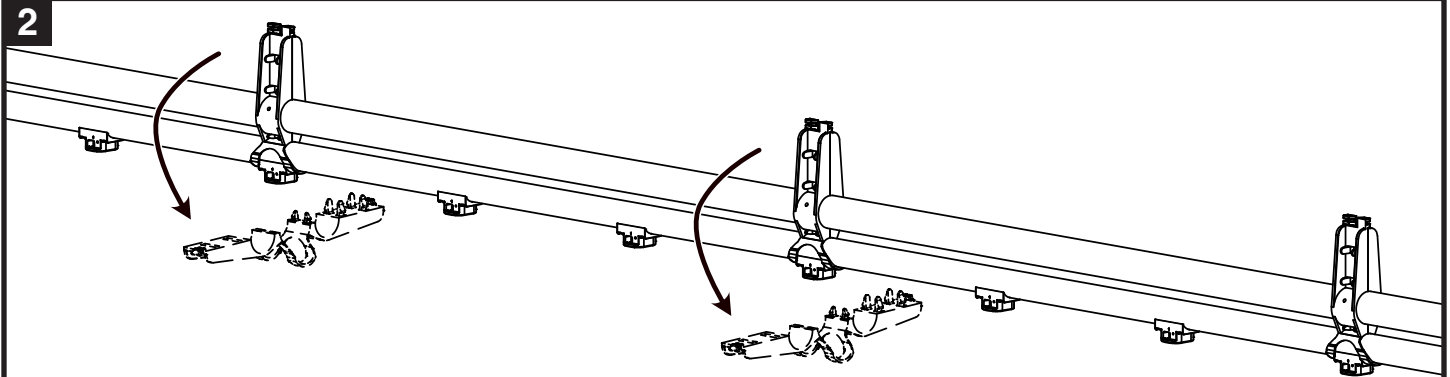
## SHUT OFF ASSEMBLY + INLINE RISER ASSEMBLY: ACE SYSTEM

1

**Note:** Illustrations show Rigid Riser Assemblies. Also applies to Flex Riser Assemblies.

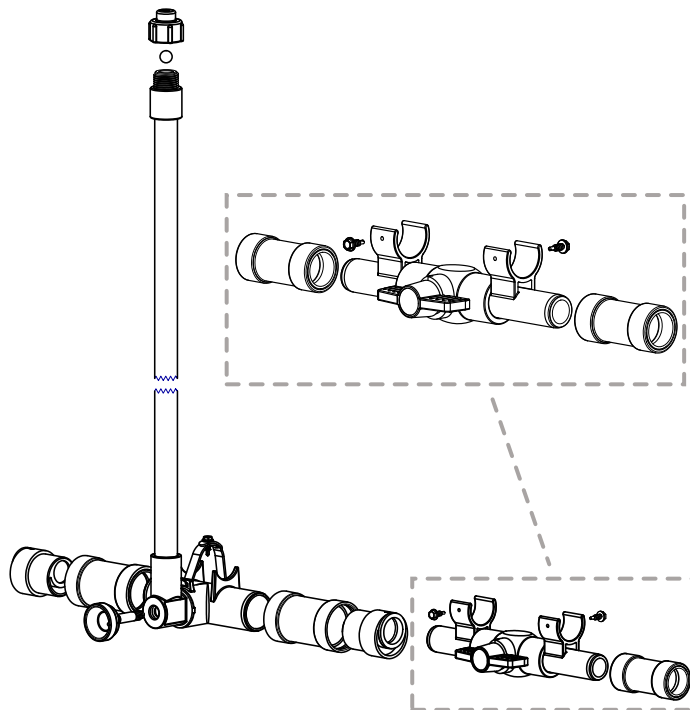


2



Remove brackets.

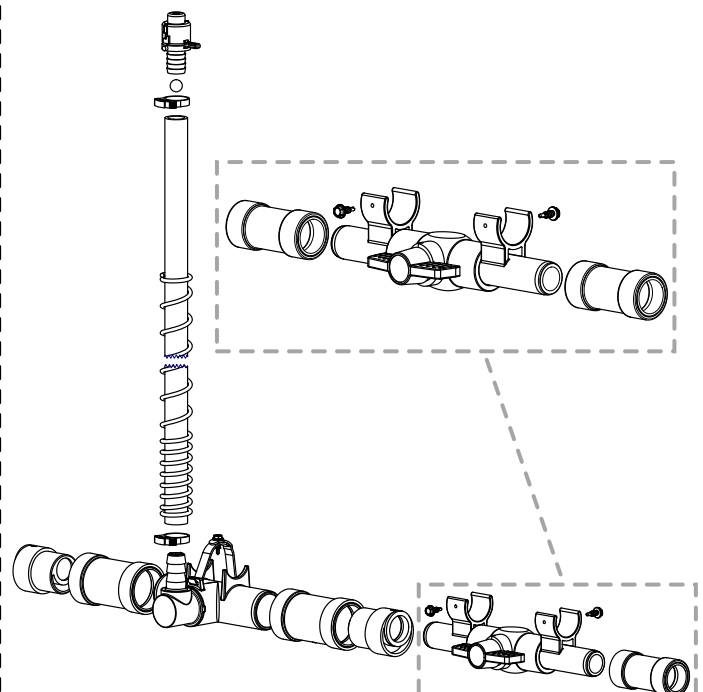
4



PN 3979 - Riser Assembly:  
Floor Rigid Ace Inline

+

PN 3992 - Shut Off  
Assembly: Ace Inline



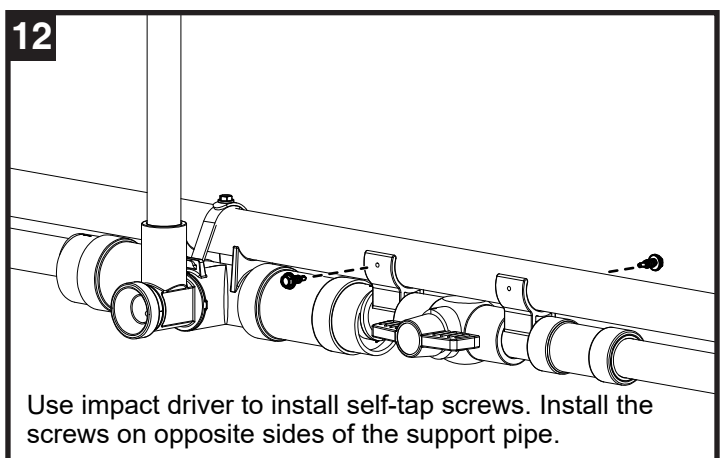
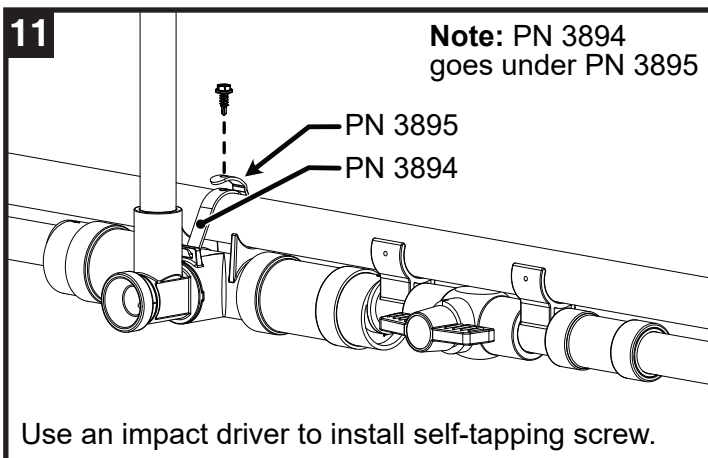
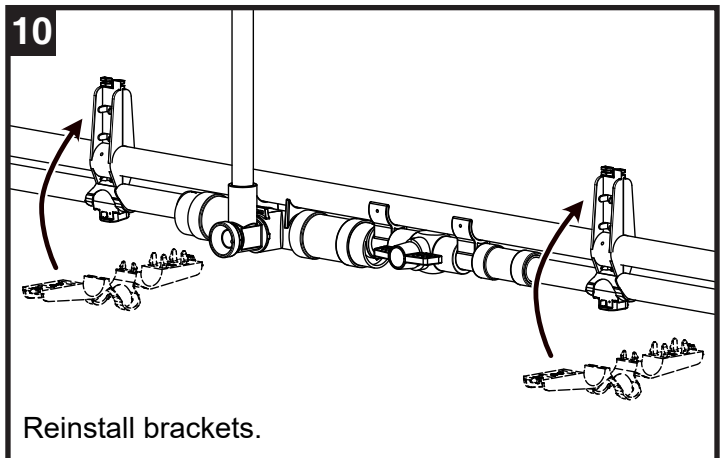
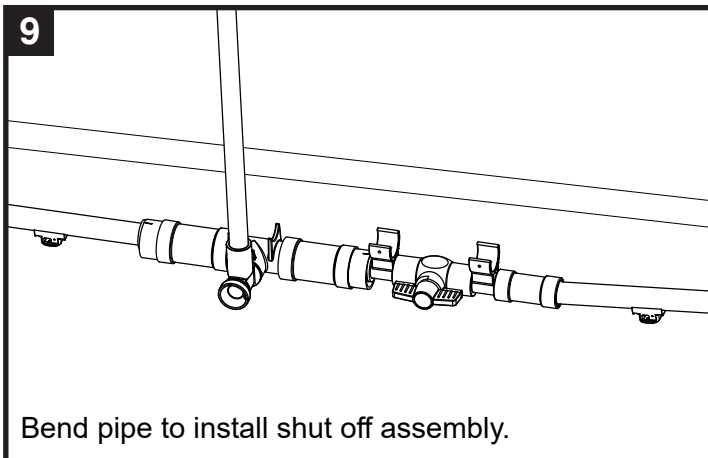
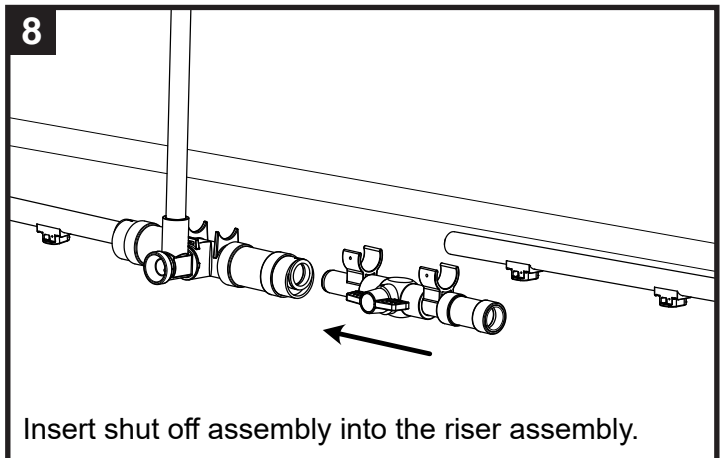
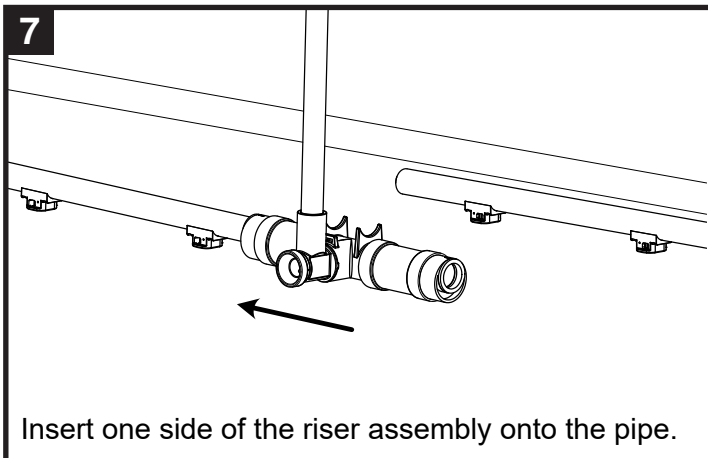
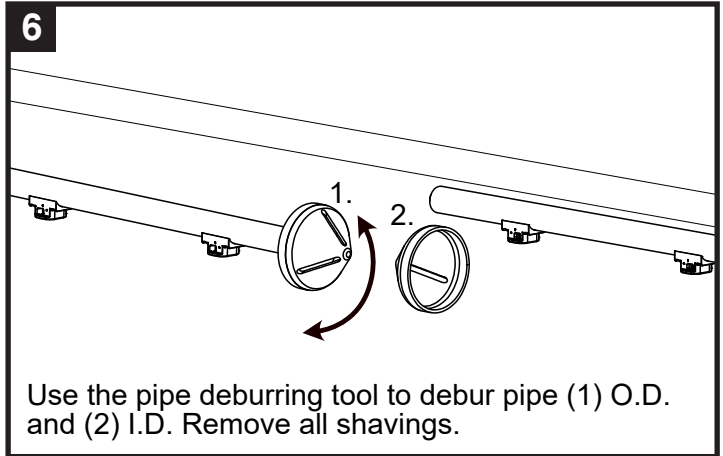
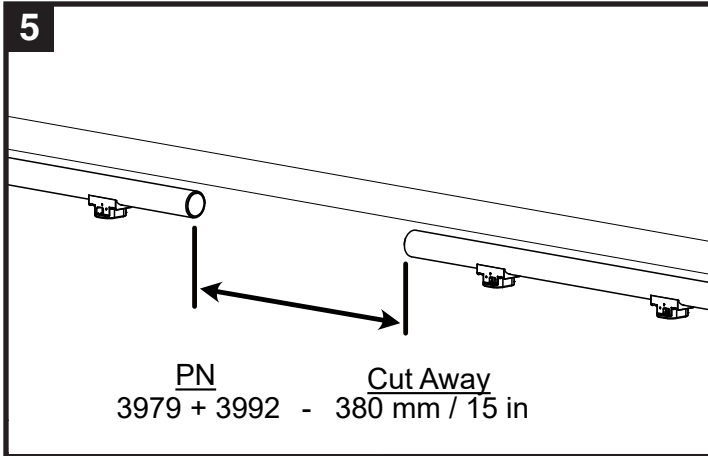
PN 3977 - Riser Assembly:  
Floor Flex Ace Inline

+

PN 3992 - Shut Off  
Assembly: Ace Inline



## SHUT-OFF ASSEMBLY + INLINE RISER ASSEMBLY: ACE SYSTEM



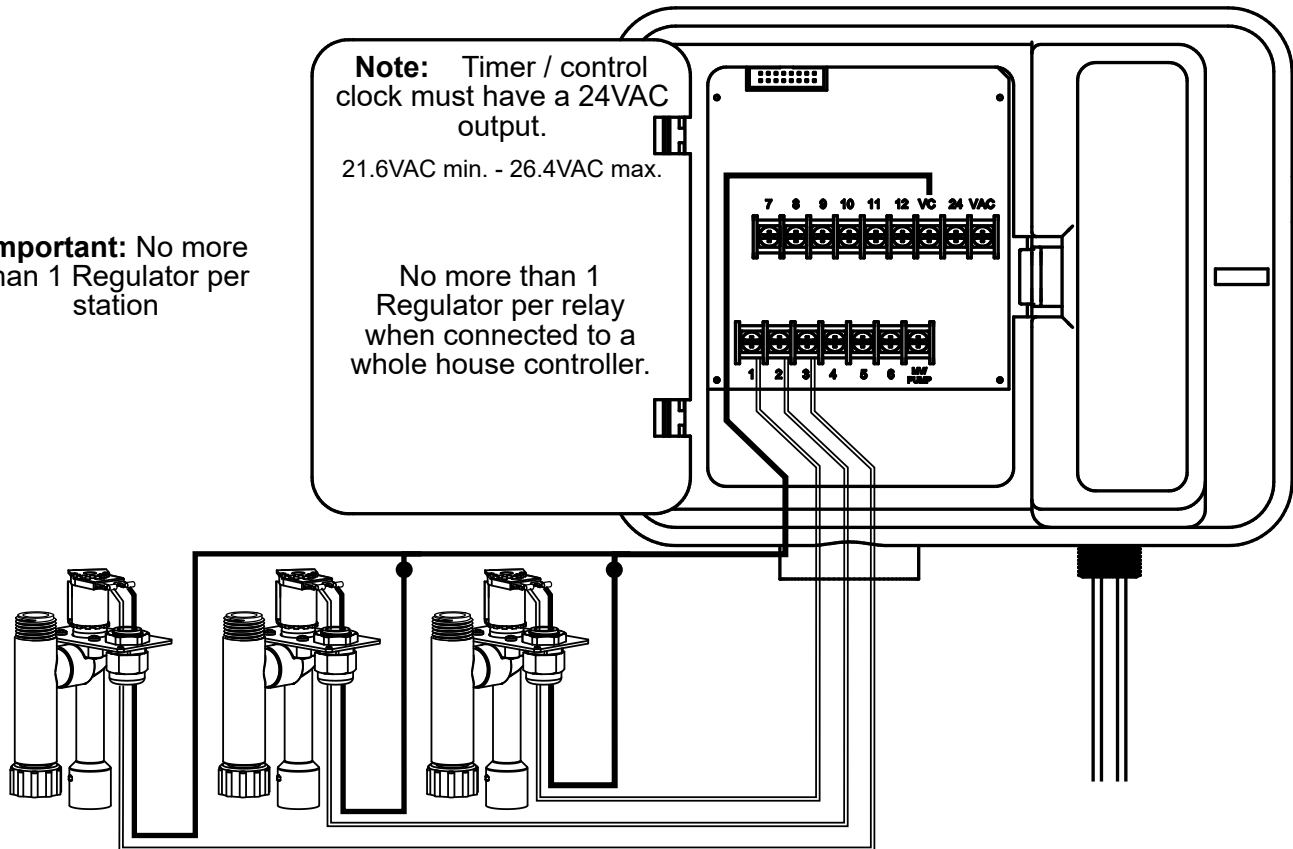
## CONTROL CLOCK / CONTROLLER / SOLENOID FLUSH

**Important:** No more than 1 Regulator per station

**Note:** Timer / control clock must have a 24VAC output.

21.6VAC min. - 26.4VAC max.

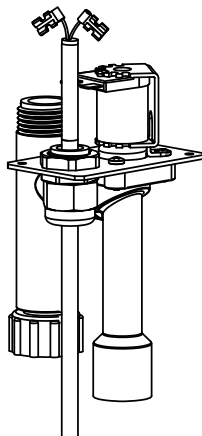
No more than 1 Regulator per relay when connected to a whole house controller.



1

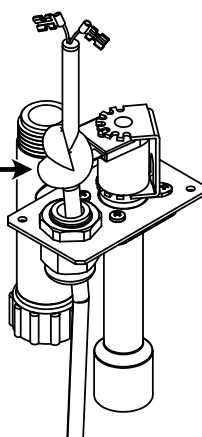
Insert wire up into the solenoid coupler. Use minimum 0.824mm<sup>2</sup> / 18 AWG 2 conductor jacketed wire.

16 AWG 2 conductor jacketed recommended.



2

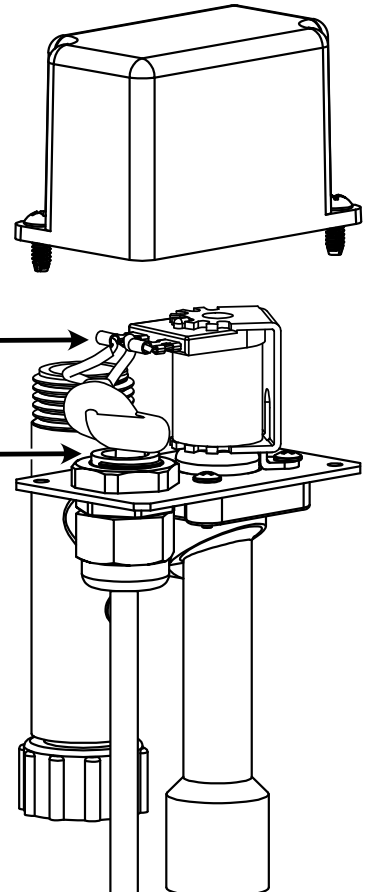
Must tie a knot as shown before making wire connections.



3

Solenoid must have one hot and one neutral wire connected to it. Connection of these wires do not matter, even in a series application.

Pull down on the wire until it is against the coupler and then tighten the nut on the bottom of the coupler.



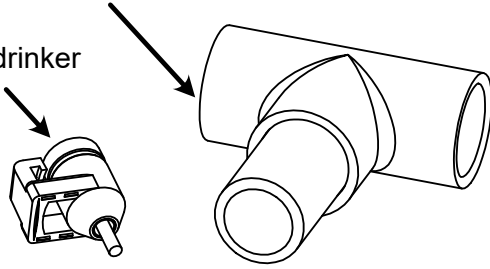
# Best Practices

## DISASSEMBLY: AKTIVE DRINKER

1

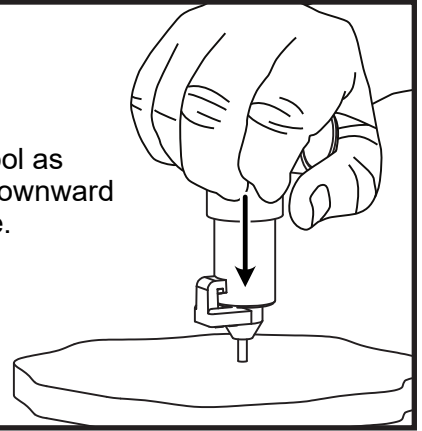
Aktive disassembly tool PN 2263

Aktive drinker

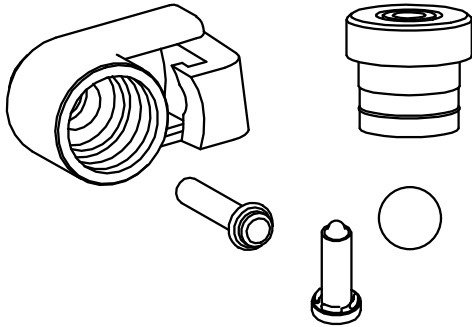


2

Load drinker into tool as shown and press downward onto a hard surface.



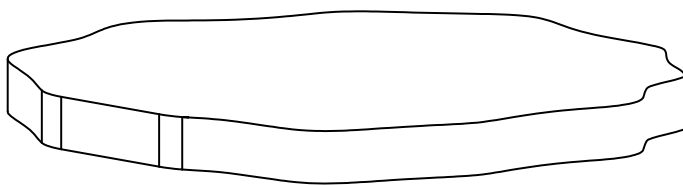
3



Components after disassembly.

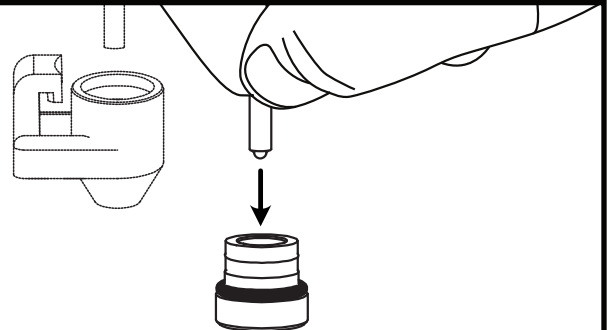
## ASSEMBLY: AKTIVE DRINKER

1



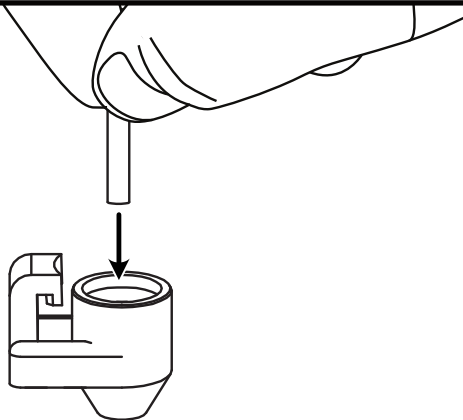
It is very important to ensure that you have a clean, flat surface to assemble the capsule. Make sure that the surface is clear of ALL debris during the entire process.

2



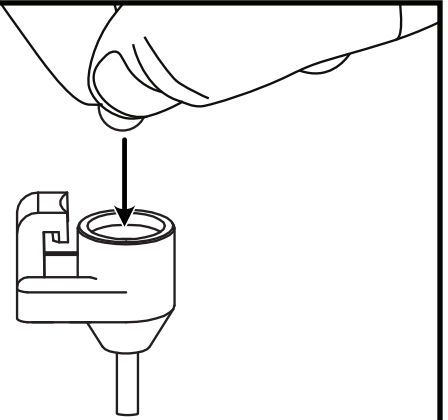
Push the O-Ring gently onto the cap. Drop the metering pin into the cap.

3



Drop the trigger pin into the drinker body.

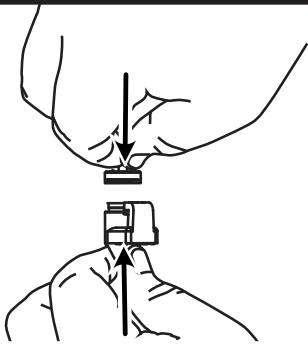
4



Drop the ball into the drinker body.

## ASSEMBLY: AKTIVE DRINKER

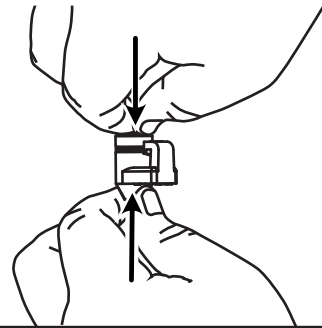
5



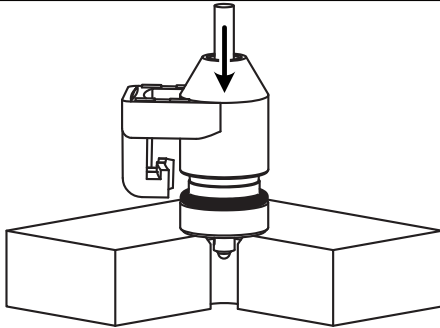
Press cap into the body as far as possible using your fingers. Snap the cap into place completely.

6

If you are unable to press the cap fully into place using your fingers see Step 7.

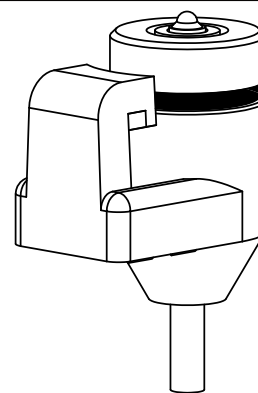


7



Find or make a block with a through hole and place drinker over the hole as shown. Press downward on the body until the cap clicks into place.

8

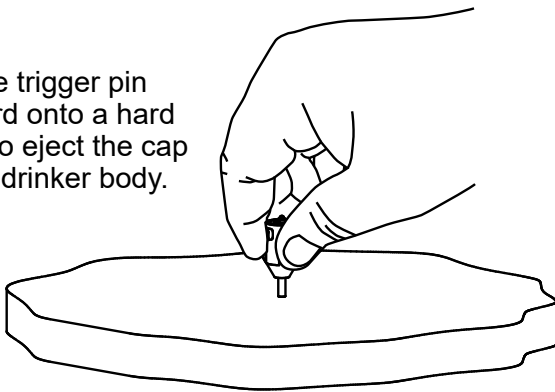


Fully assembled and fully seated into drinker body.

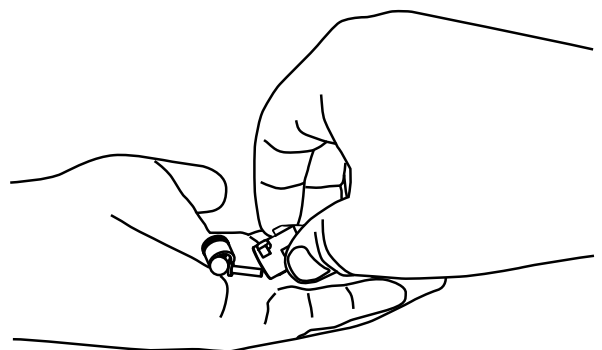
## DISASSEMBLY: MAX8 & MAX3 3600 SERIES DRINKERS

1

Press the trigger pin downward onto a hard surface to eject the cap from the drinker body.

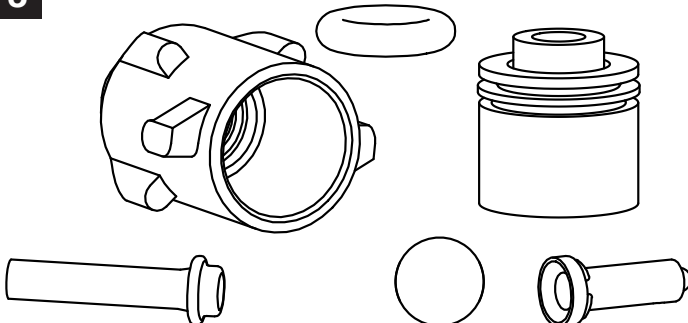


2



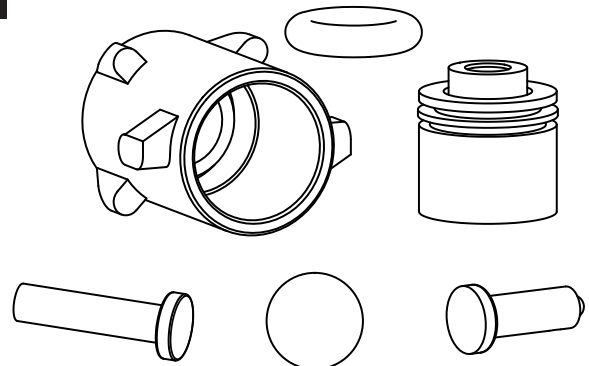
Fully assembled and fully seated into drinker body.

3



MAX3 3600 Series components after disassembly.

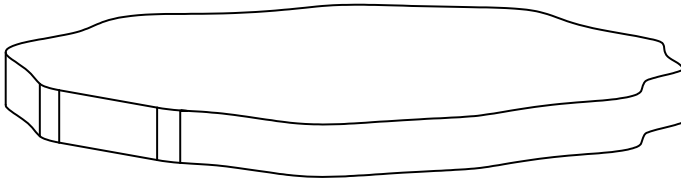
4



MAX8 Series components after disassembly.

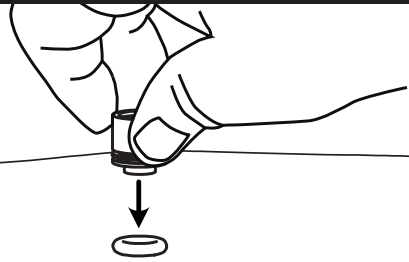
## ASSEMBLY: MAX8 & MAX3 3600 SERIES DRINKERS

1



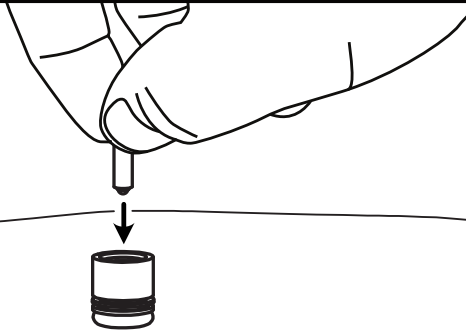
It is very important to ensure that you have a clean, flat surface to assemble the capsule. Make sure that the surface is clear of ALL debris during the entire process.

2



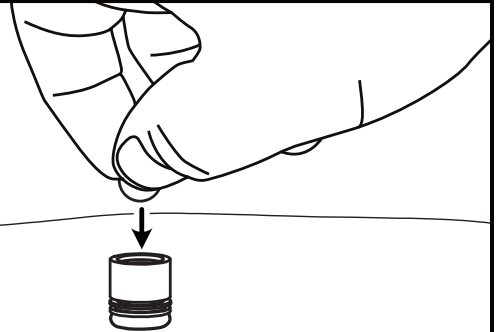
Place the O-Ring onto the flat surface. Push the cap gently into the O-Ring.

3



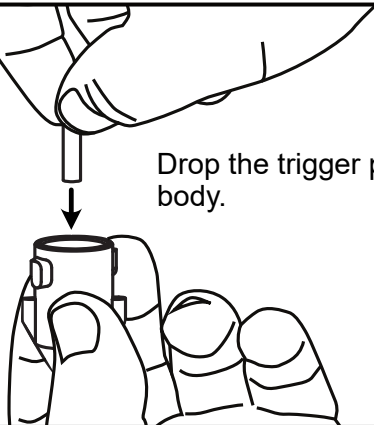
Drop the metering pin into the cap.

4



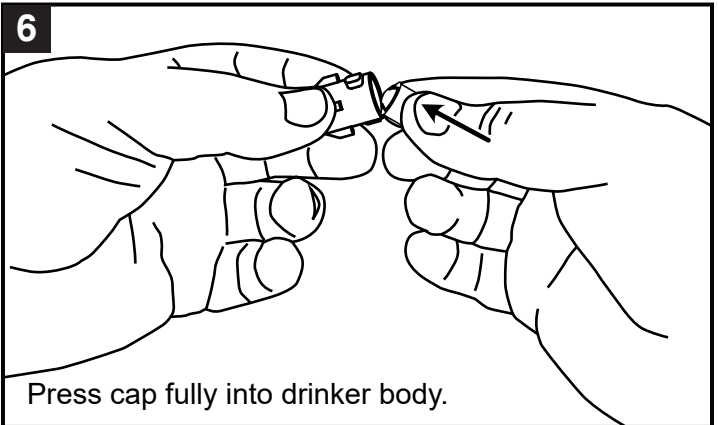
Drop the ball into the cap.

5



Drop the trigger pin into the drinker body.

6

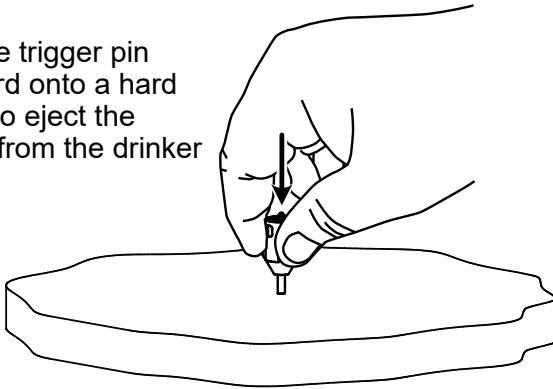


Press cap fully into drinker body.

## DISASSEMBLY: BIG Z, TL, & ALL NON 3600 SERIES DRINKERS

1

Press the trigger pin downward onto a hard surface to eject the capsule from the drinker body.

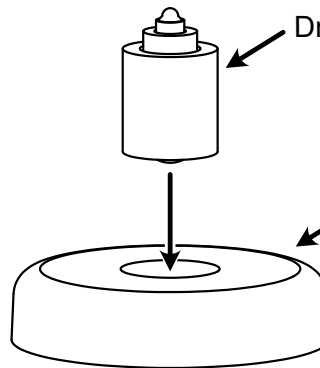


2

Drinker Capsule

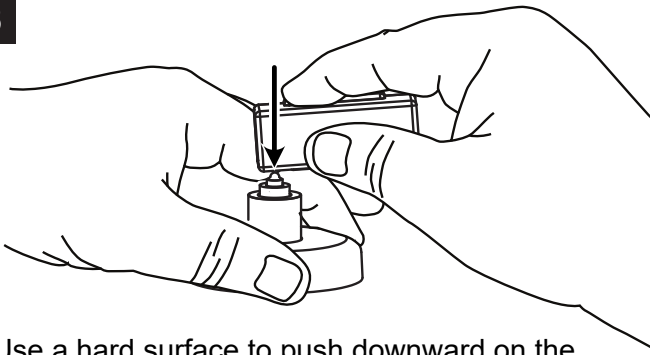
Disassembly Tool  
TL: PN 2515  
Big Z: PN 2516

Insert drinker capsule into disassembly tool as shown. Place the O-Ring to the side.



3

Use a hard surface to push downward on the metering pin.



4

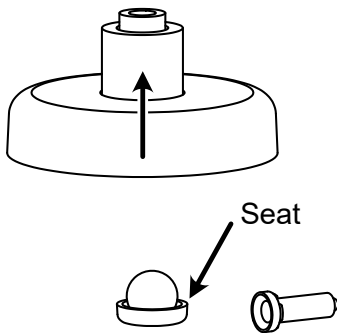
Never use a tool or any object to pry the seat out of the cap.



5

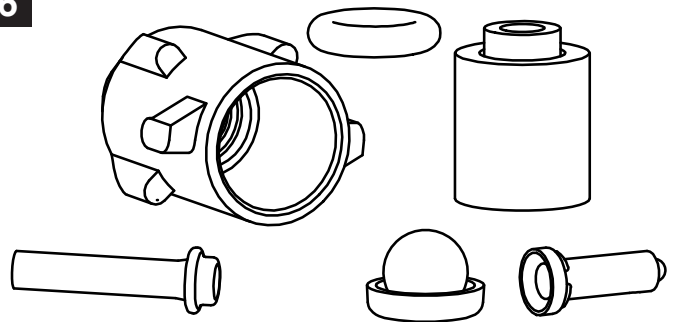
Seat

Remove disassembly tool. The ball, seat and metering pin will come out as shown.



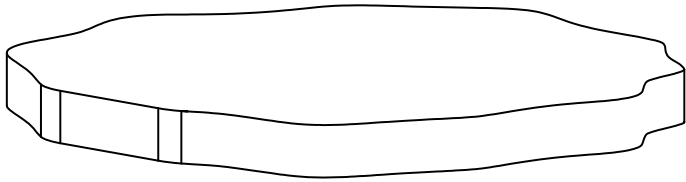
6

Components after disassembly.



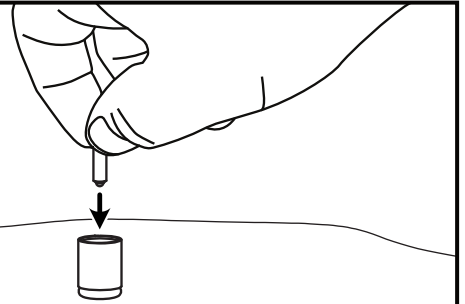
## ASSEMBLY: BIG Z, TL, & ALL NON 3600 SERIES DRINKERS

1



It is very important to ensure that you have a clean, flat surface to assemble the capsule. Make sure that the surface is clear of ALL debris during the entire process.

2



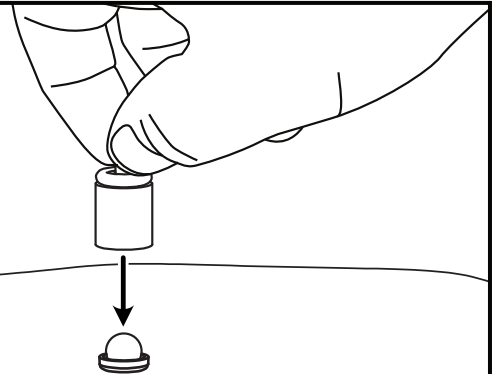
Place O-Ring onto the flat surface. Push the cap gently into the O-Ring. Drop the metering pin into the cap.

3



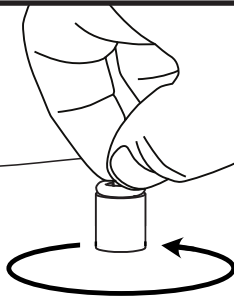
Place the seat with a ball in the middle onto the flat surface.

4



Hold the metering pin and cap as shown. Push the assembly onto the ball and seat.

5



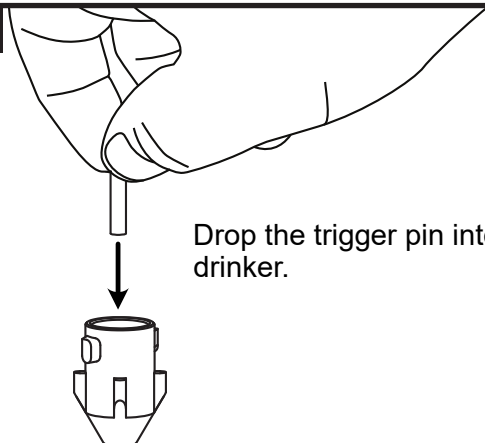
Use a circular motion while pressing the cap assembly flat against the surface.

6



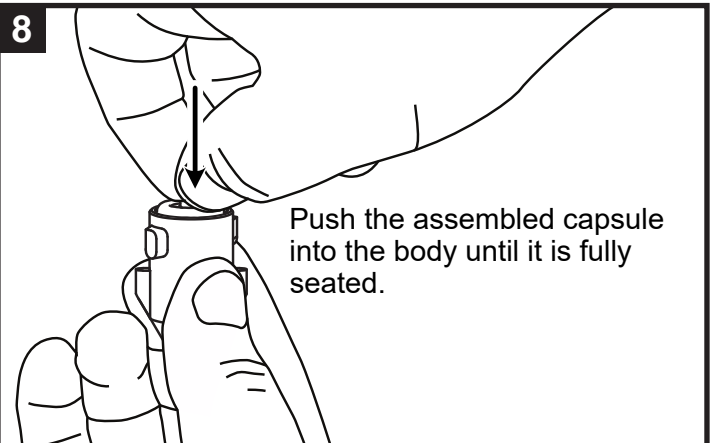
NEVER use your thumb or anything to push the seat into the cap once you have completed Step 5.

7



Drop the trigger pin into the drinker.

8

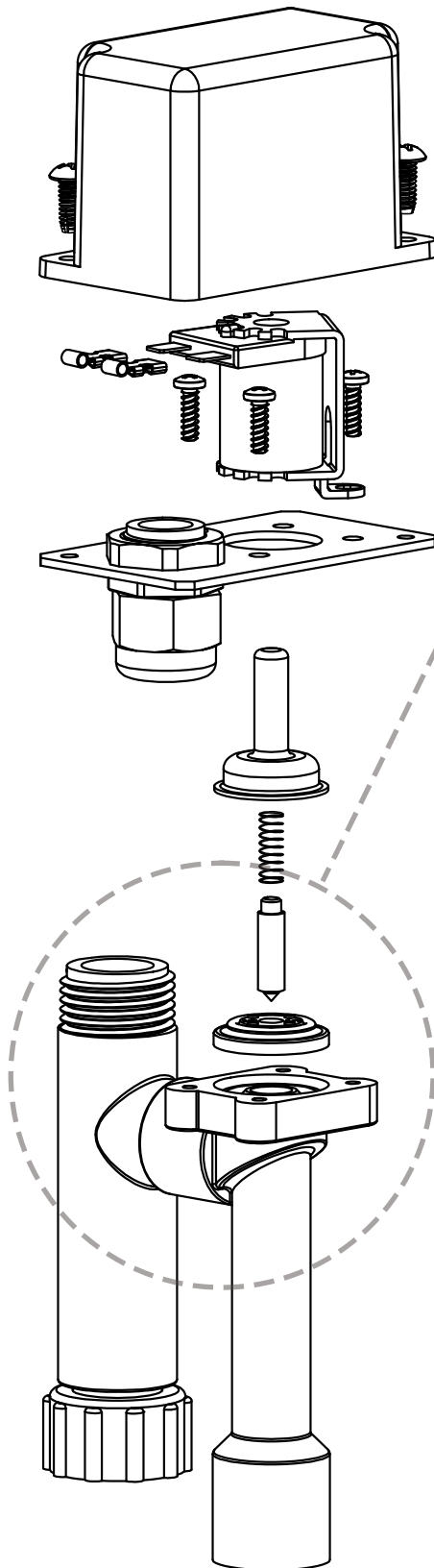


Push the assembled capsule into the body until it is fully seated.



## SOLENOID VALVE MAINTENANCE

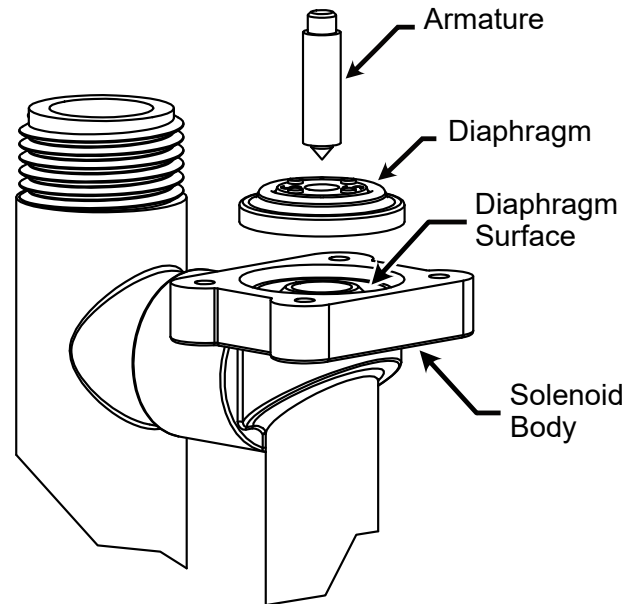
1



Components after disassembly.

3

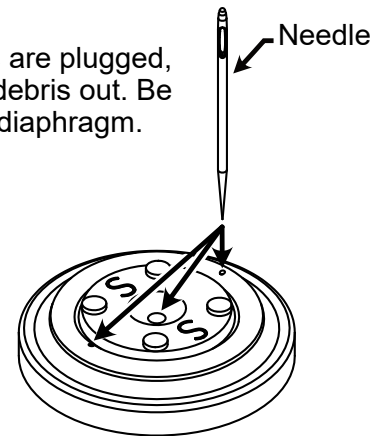
Armature: Make sure point is facing downward, as shown, when reassembling.



Clean solenoid body (Diaphragm surface), diaphragm and any other parts that appear dirty. Use warm soapy water and a toothbrush. Be careful not to tear the diaphragm.

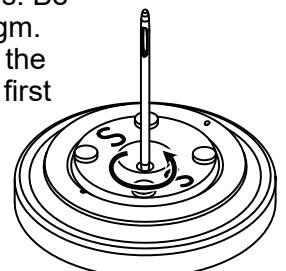
3

If the diaphragm holes are plugged, use a needle to push debris out. Be careful not to tear the diaphragm.



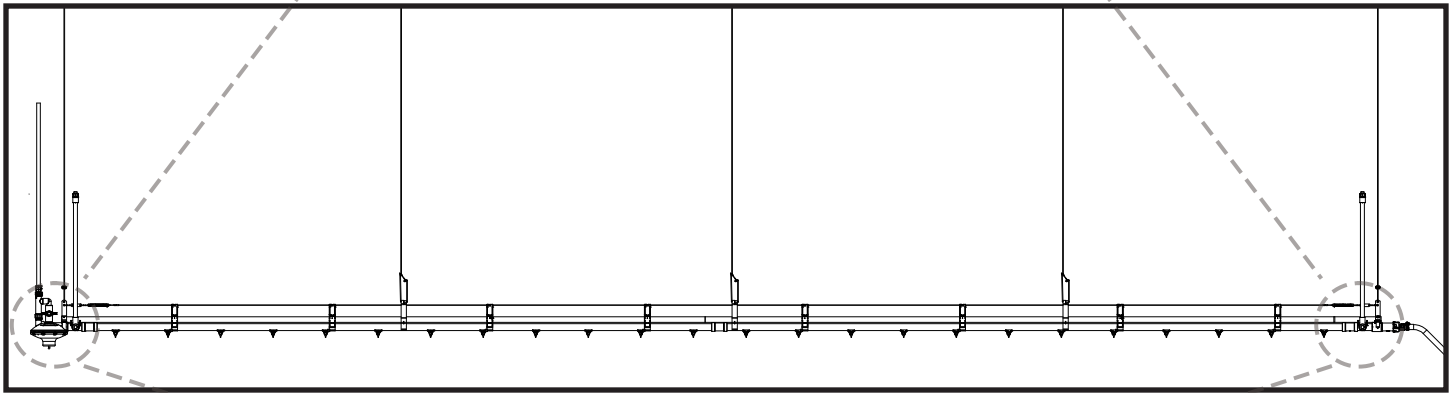
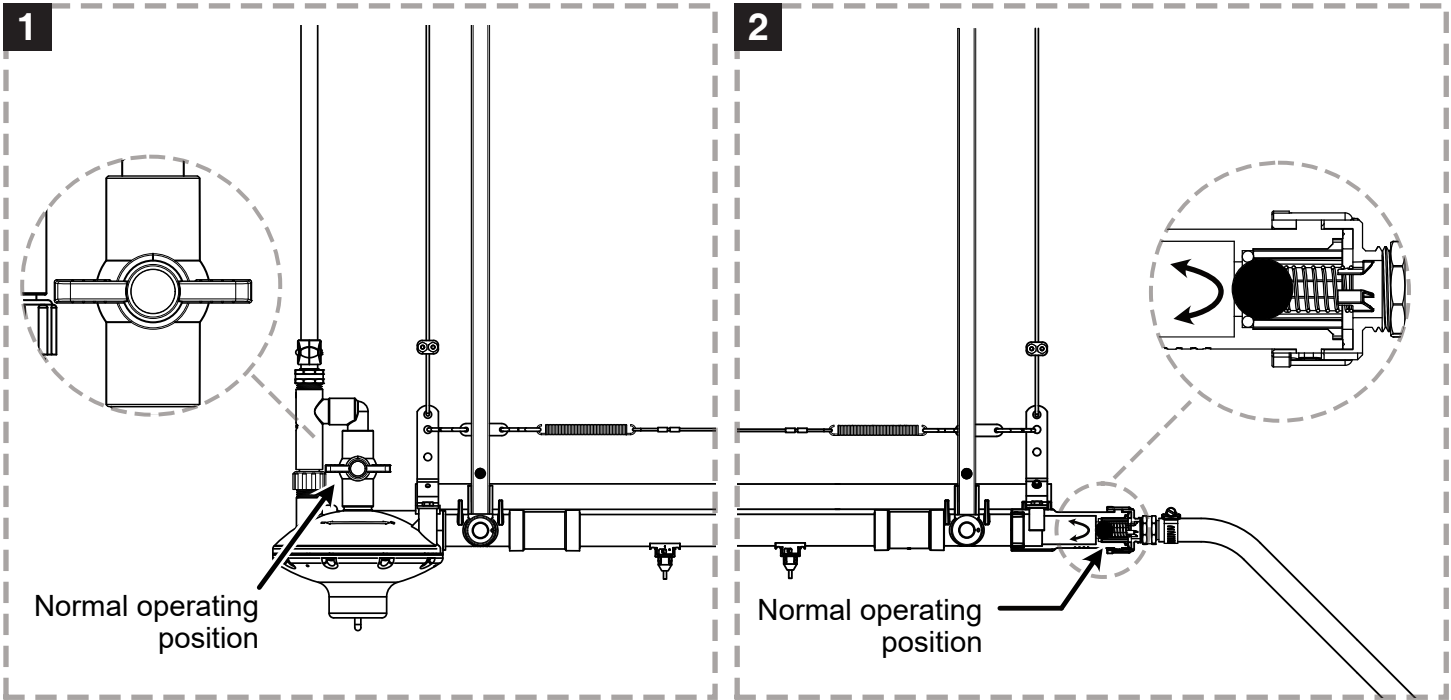
4

Gently move the needle in a circular motion to further remove debris. Be careful not to tear the diaphragm. Reassemble solenoid valve in the reverse order as shown in the first step.

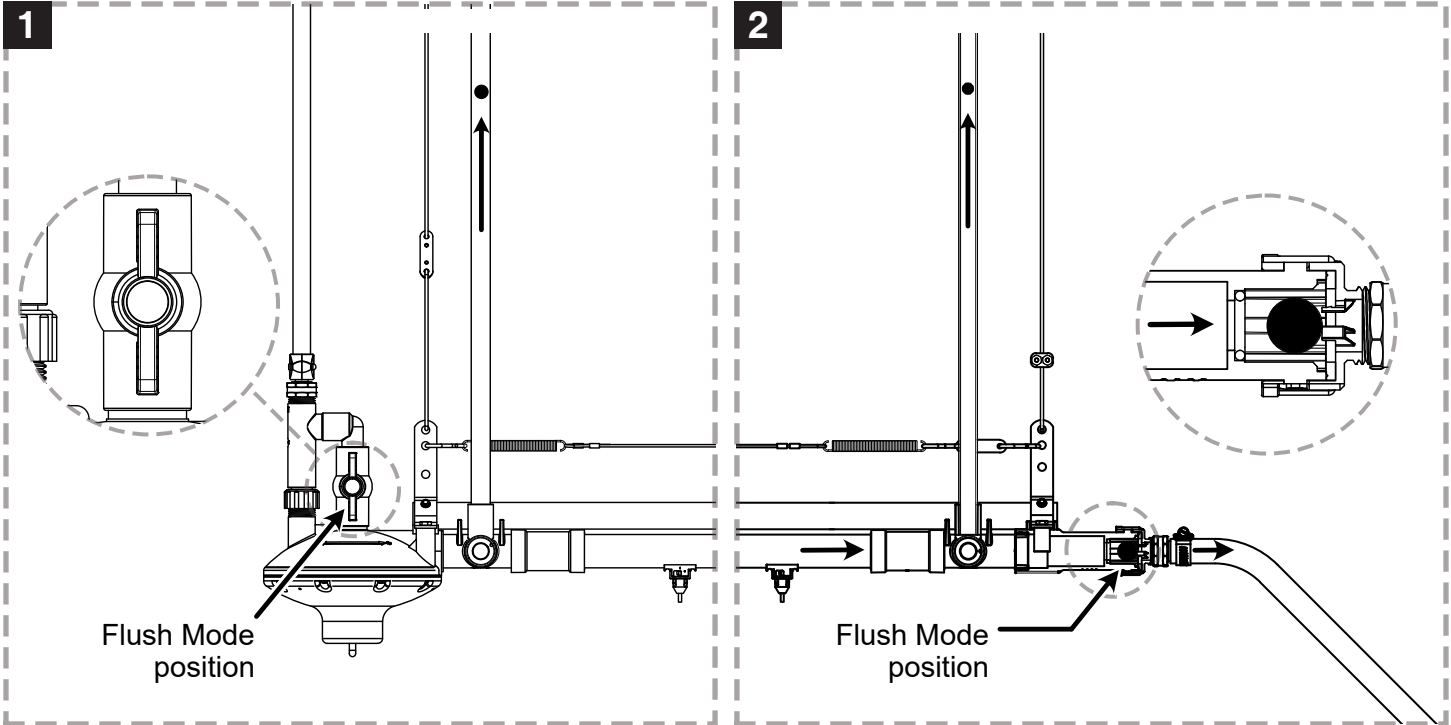


# APPENDIX

NORMAL OPERATION MODE



FLUSH MODE

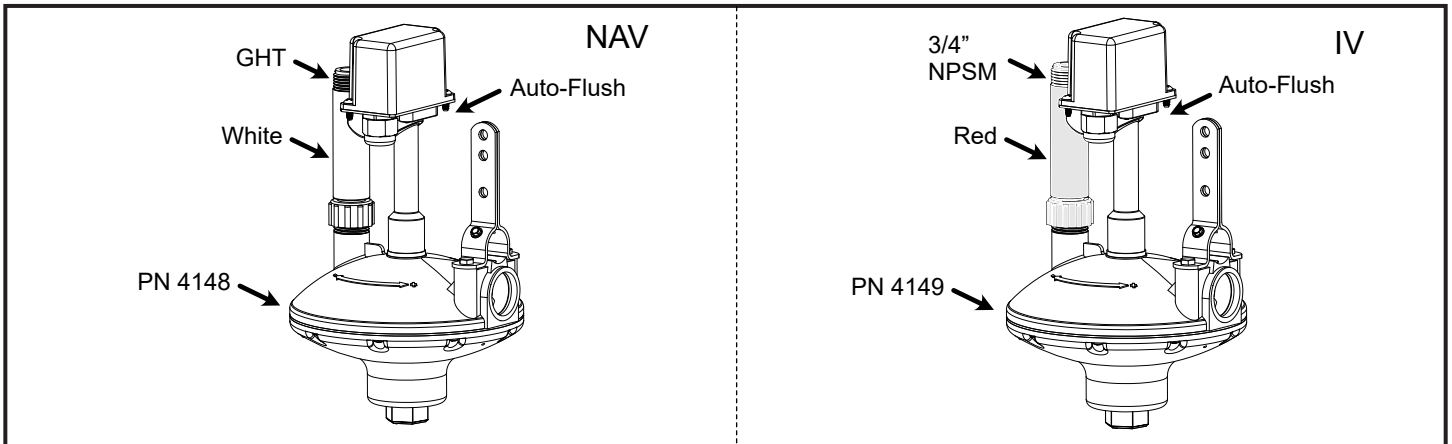
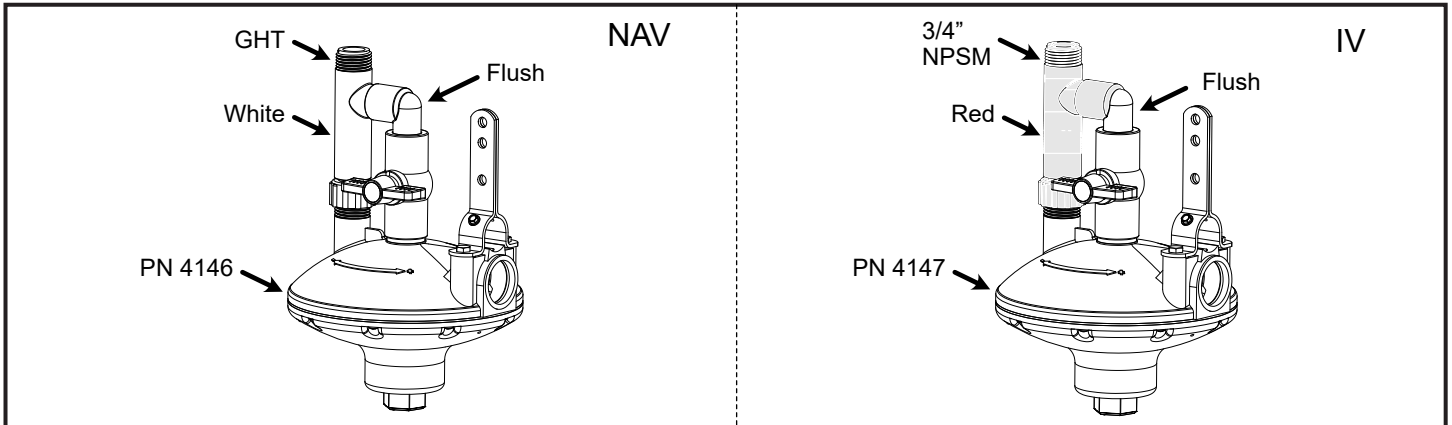


# KEY FOR TERMS & NOMENCLATURE

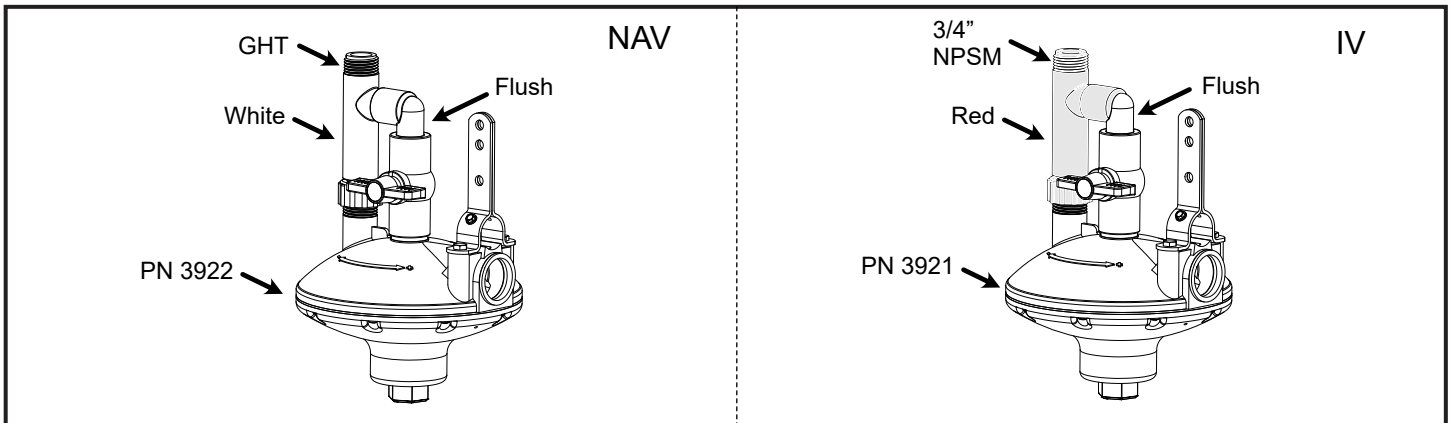
## REGULATOR ASSEMBLY

**CLASSIC** = REGULATOR ASSEMBLY TOP WITH RISER  
**NUVO** = REGULATOR ASSEMBLY TOP WITHOUT RISER  
**FLUSH** = MANUAL FLUSH FEATURE  
**AUTO FLUSH** = SOLENOID FLUSH FEATURE  
**NAV** = NORTH AMERICAN VERSION "GHT"  
**IV** = INTERNATIONAL VERSION "3/4" NPSM"  
**APA** = ACE PIPE ADAPTER  
**ARF** = ADJUSTMENT RESISTANCE FEATURE  
**LPR** = LOW PRESSURE RANGE  
**PN** = PART NUMBER

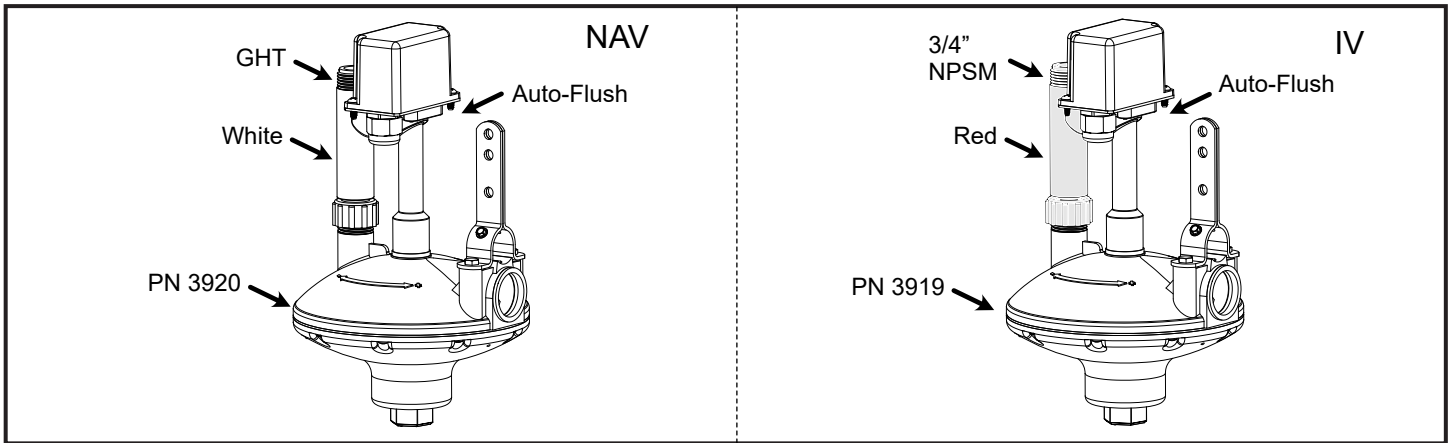
### BROILER BREEDER APPLICATION



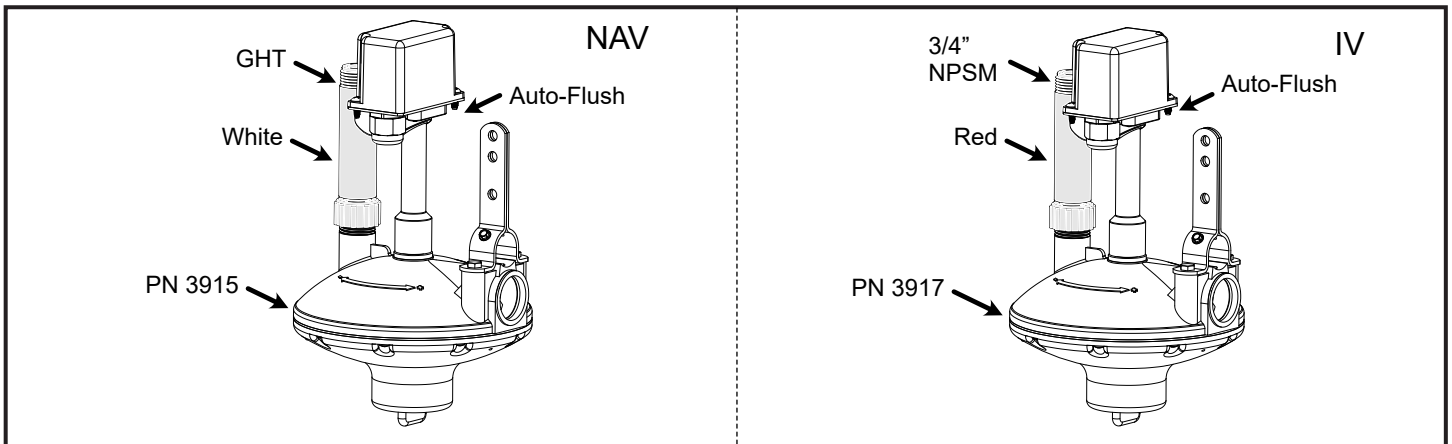
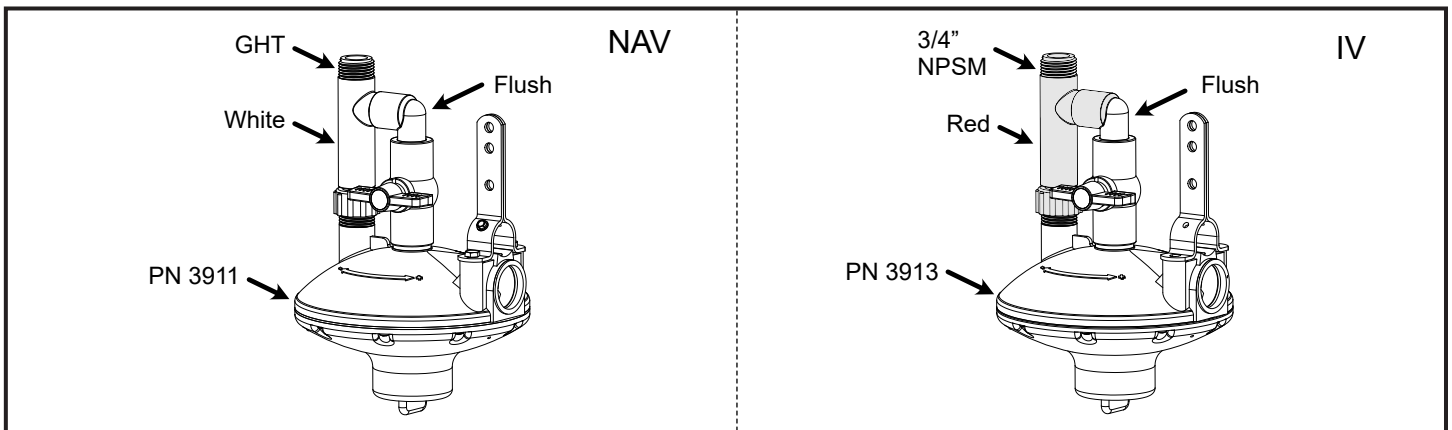
### TURKEY & TURKEY POULT APPLICATION



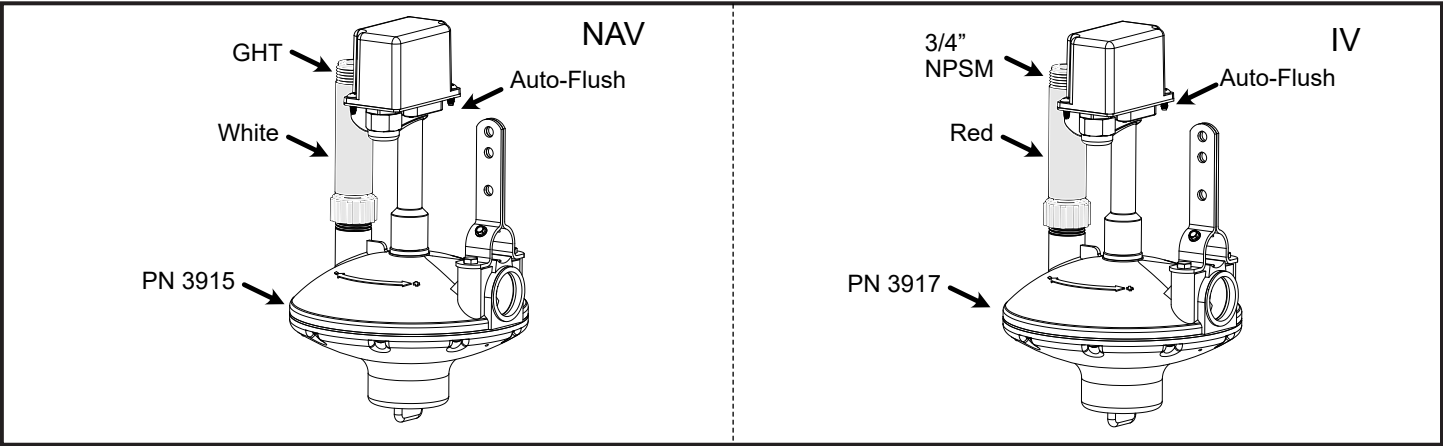
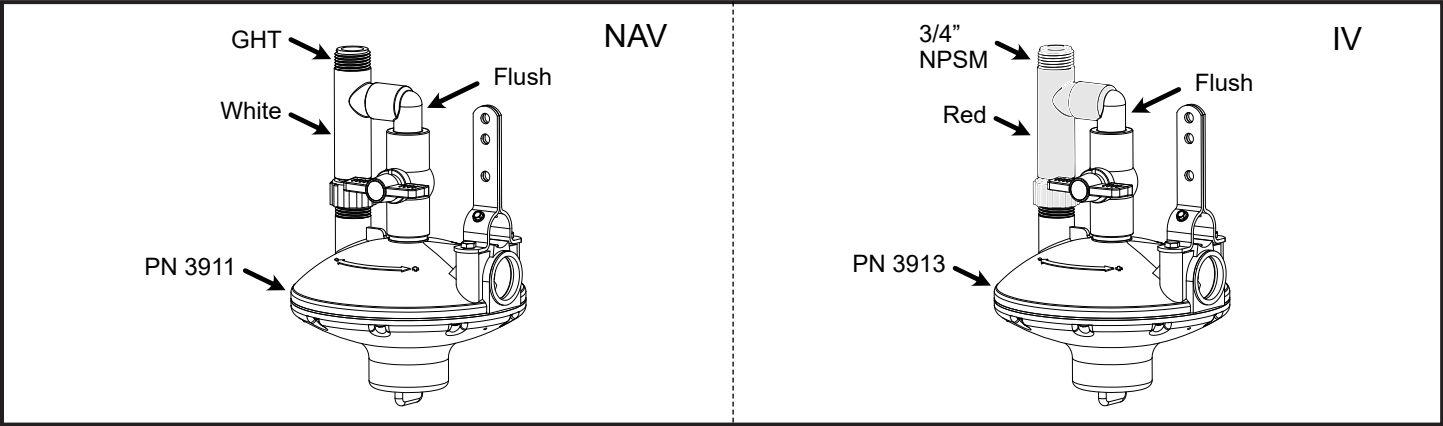
## TURKEY & TURKEY POULT APPLICATION



## BROILER APPLICATION



ALL OTHER BIRD APPLICATIONS

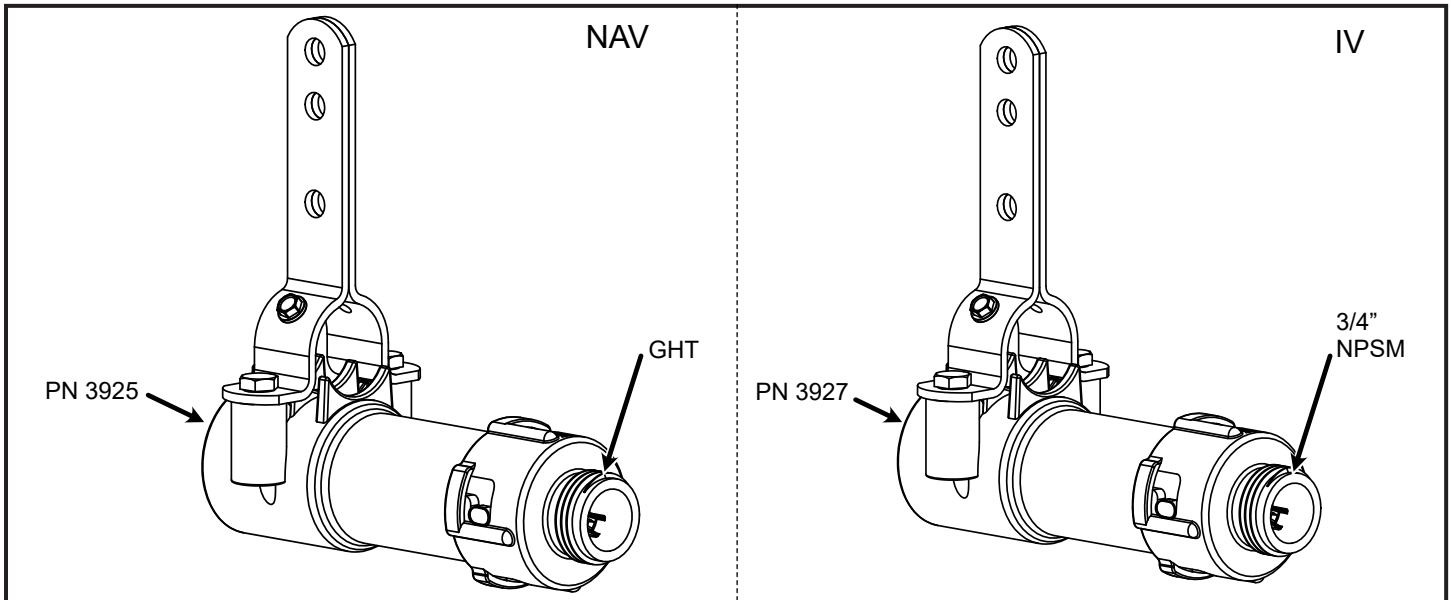


## KEY FOR TERMS & NOMENCLATURE

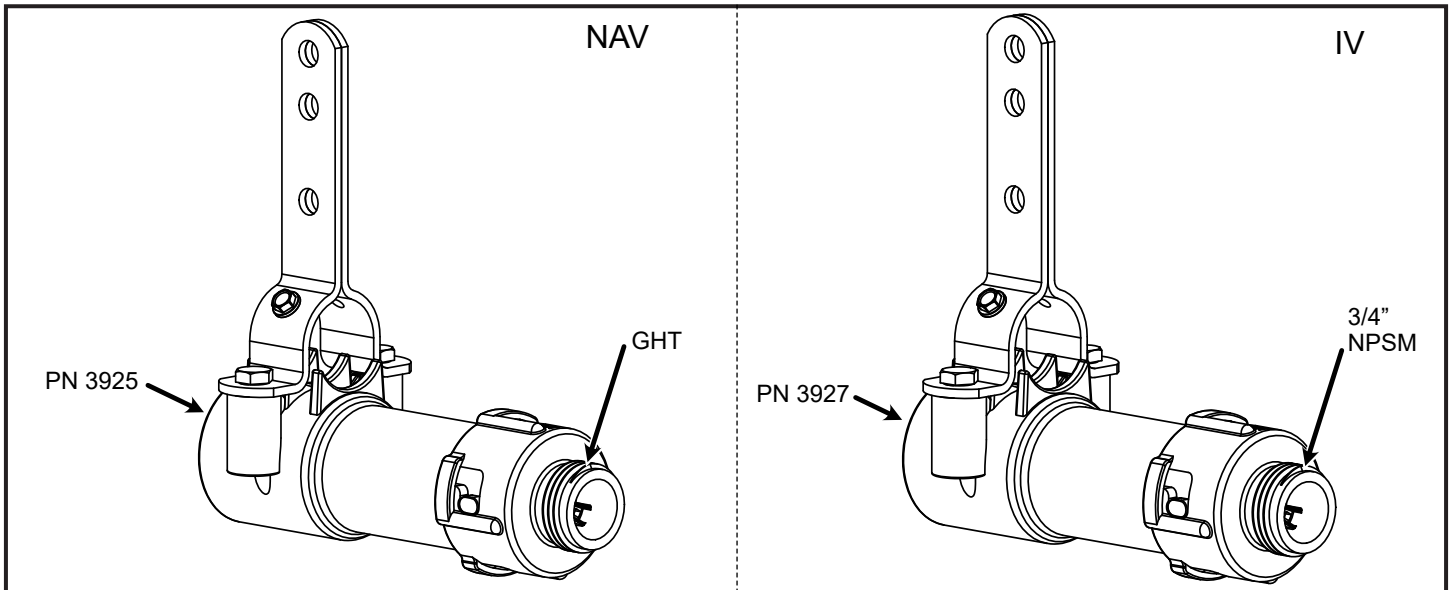
### FLUSH END ASSEMBLY

**CLASSIC** = END ASSEMBLY TOP WITH RISER  
**NUVO** = END ASSEMBLY TOP WITHOUT RISER  
**FLUSH** = MANUAL FLUSH FEATURE  
**AUTO FLUSH** = SOLENOID FLUSH FEATURE  
**NAV** = NORTH AMERICAN VERSION "GHT"  
**IV** = INTERNATIONAL VERSION "3/4" NPSM"  
**APA** = ACE PIPE ADAPTER  
**PN** = PART NUMBER

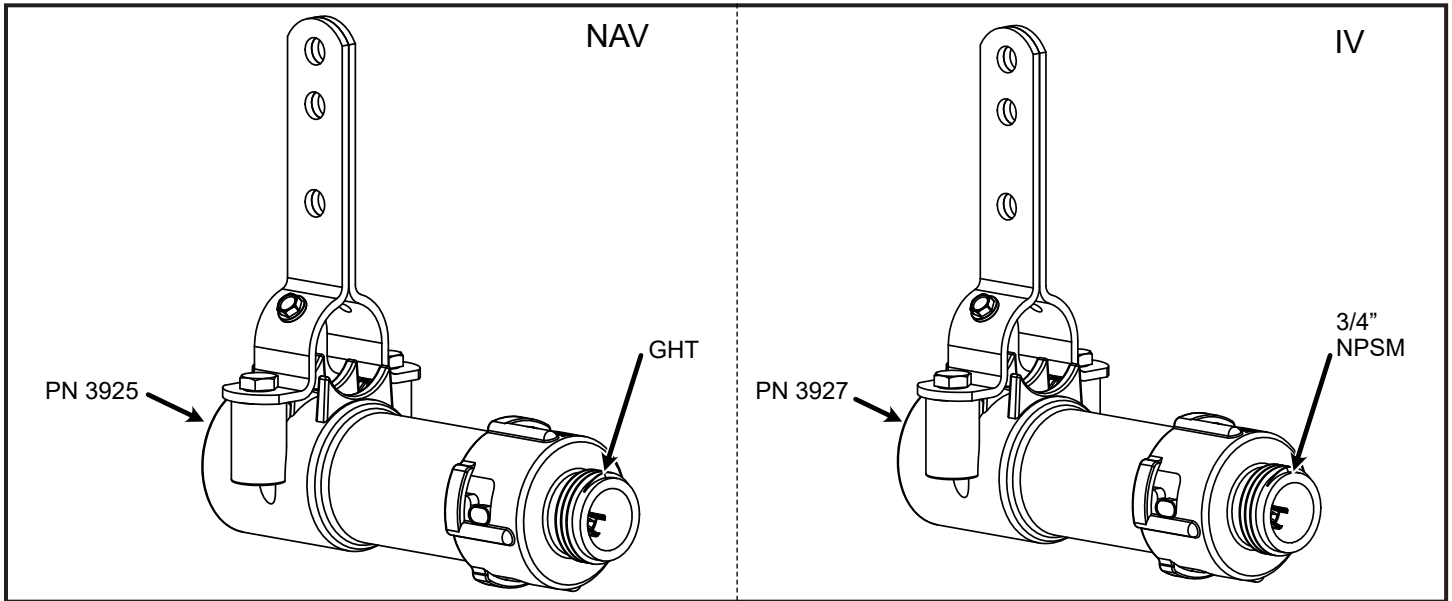
### BROILER BREEDER APPLICATION



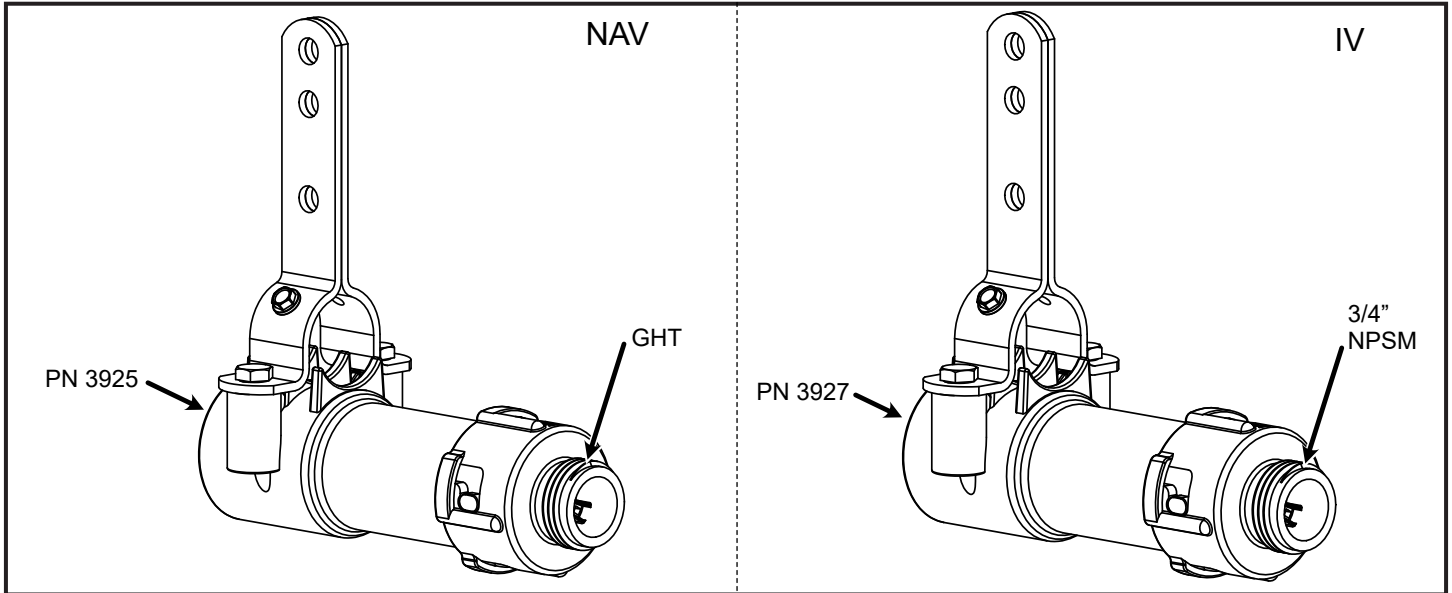
### TURKEY & TURKEY POULT APPLICATION



## BROILER APPLICATION



## ALL OTHER BIRD APPLICATIONS





# KEY FOR TERMS & NOMENCLATURE

## RISER ASSEMBLY

**NUVO** = RISER ASSEMBLY INLINE & ENDLINE

**RIGID** = RIGID RISER TUBE

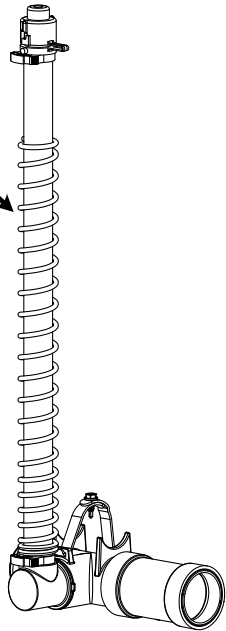
**FLEX** = FLEXIBLE RISER TUBE

**APA** = ACE PIPE ADAPTER

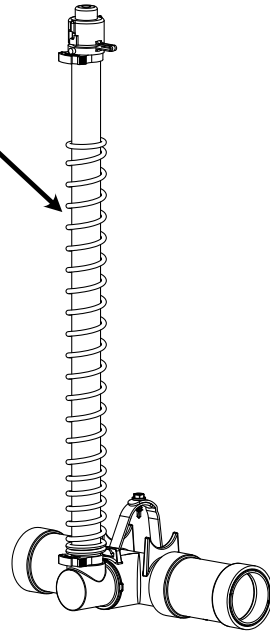
**PN** = PART NUMBER

## BROILER BREEDER APPLICATION

PN 4170  
Flex Endline

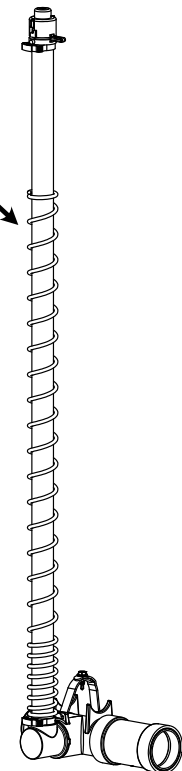


PN 4171  
Flex Inline

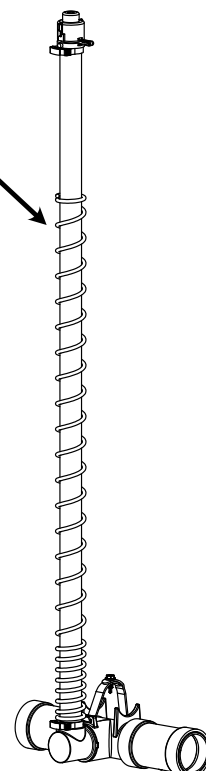


## TURKEY & TURKEY POULT APPLICATION

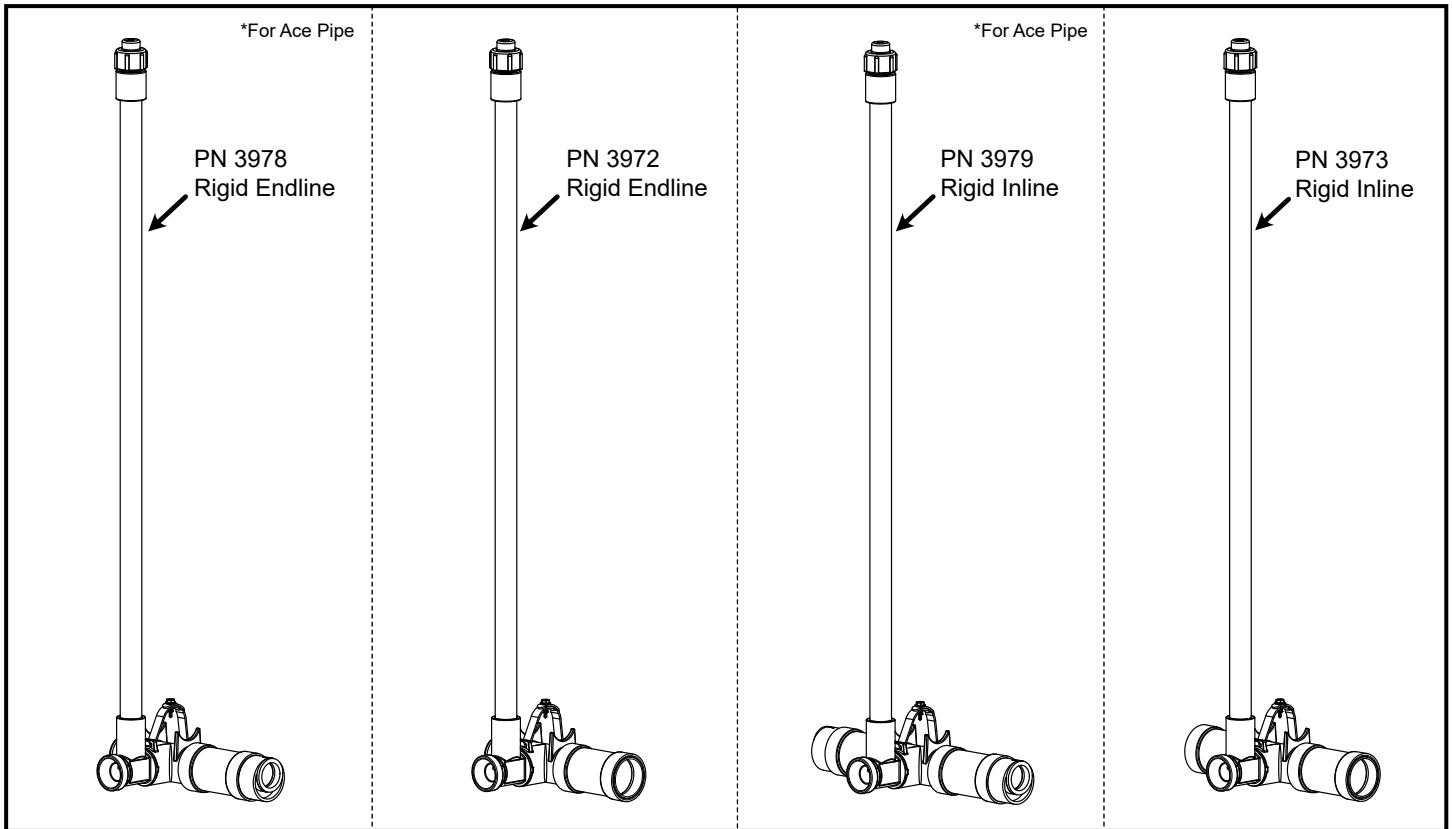
PN 3970  
Flex Endline



PN 3971  
Flex Inline



## BROILER APPLICATION



## ALL OTHER BIRD APPLICATIONS

